DUBLIN CITY COUNCIL

AMBIENT SOUND MONITORING NETWORK

Annual Report 2016

Dublin City Ambient Sound Monitoring Website

WWW.DublinCityNoise.com

Produced by

Traffic Noise & Air Quality Unit,

Environment and Transportation Department,

Dublin City Council.

Contact: Ph. 01 2223847; E-mail: *noisemaps@dublincity.ie*

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

Table of Contents

Contact Information: Traffic Noise & Air Quality Unit

Block 2, Floor 6,

Civic Offices,

Wood Quay.

Dublin 8

Phone: 00353 1 2223847

E-Mail: noisemaps@dublincity.ie

www.dublincitynoise.ie

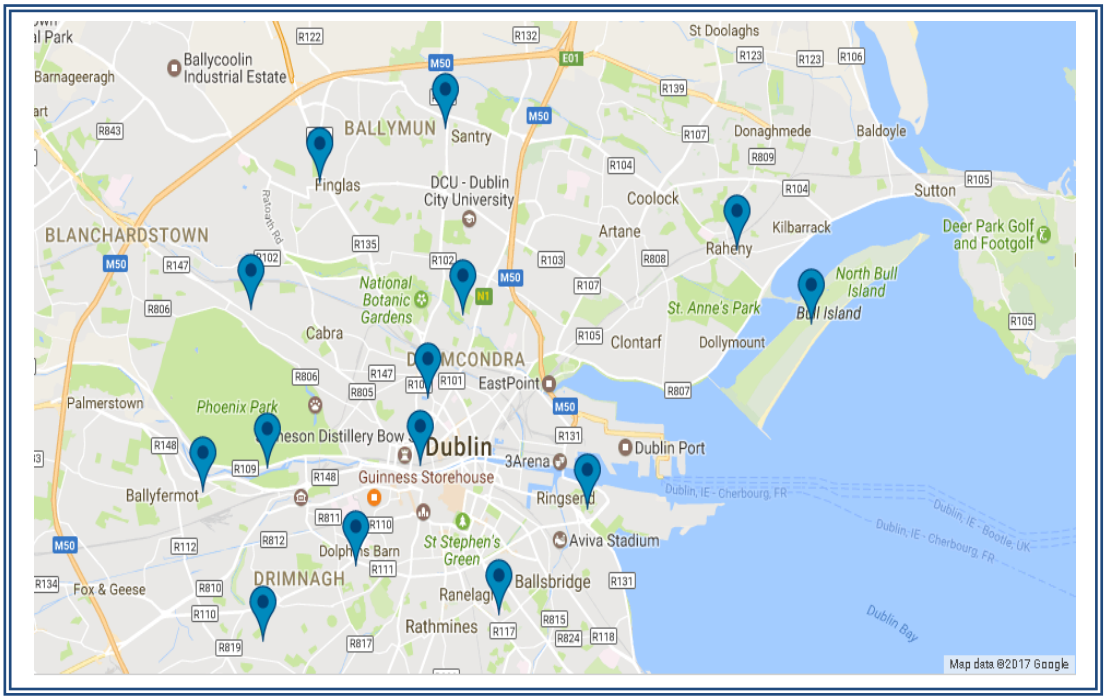
List of Figures

Page

Introduction

This is the eighth Annual Report for the Dublin City Ambient Sound Monitoring Network. Dublin City Council commenced the installation of a permanent ambient sound monitoring network in 2009. Currently the monitoring network comprises of 14 sites. The purpose of the network is to measure outdoor ambient sound levels in the City, at sites which are representative of typical sound levels to which citizens are being exposed. It does not measure 'Noise Levels' – See *'What is Noise?'*

Fig. 1 Sound Monitoring Sites -



Sites are selected so that, in so far as is possible, no single dominant sound source, such as major roads, road junctions, industrial sources etc. have a disproportionate influence on the outdoor ambient sound levels being measured.

The network currently consists of 14 monitoring locations. These are:-

- Ashtown, off Navan Rd. D7, Private House.
- Ballyfermot Road, D10, Civic Centre.
- Ballymun Road, D11, Library.
- Bull Island, D3, Interpretative Centre
- Chapelizod Road, D8, Dublin City Council Rowing Club.
- Howth Road, D5, Raheny Library.
- Blessington St, D1, Blessington Basin
- Millmount Avenue, D9, Library.
- Percy French Road, D12, Walkinstown Library.
- Ringsend, D4, Irishtown Stadium.
- Woodstock Gardens, Ranelagh, D6.
- Chancery Park, Dublin 1, Public Park.
- Dolphin's Barn, Crumlin Rd, Dublin 8.
- Mellowes Park, Finglas, Dublin 11.

What is Noise?

There is a subtle difference, which can lead to a misunderstanding, in relation to noise and the actual sound we hear. Noise is often defined as unwanted sound. As such, it is a subjective response or value judgement in relation to a sound stimulus. This 'judgement' can be influenced by the sound level of the acoustic stimulus, the time of its occurrence, its time domain, its frequency spectrum and its informational content. An authoritative report published in the UK in 1963 – known as the Wilson report, defined noise as "sound which is undesired by the recipient". The Report also noted that it is well known that the actual loudness of a noise is not by itself a measure of whether it will give rise to annoyance or complaint.

What turns a 'physical sound measurement' into a 'subjective noise level' causing annoyance is dependent on the context within which the observer hears the sound\noise. As such, quoting sound levels without putting them into context is somewhat meaningless. This report provides a site location map for each site in order to enable the reader to put the site and its measurements into the context of its physical surroundings i.e. – is it close to a main road, is it in the City or suburbs, is it a Quiet Area? It also defines the time periods over which the measurements are taken.

Dublin City Council Sound Monitoring Website

A specific website dedicated to displaying near real-time ambient sound monitoring is available to the public. One can now see current sound levels at a glance, but can also obtain further historical data by clicking on the provided links and 'drilling down' further into the data. Links are also provided to information on what the various measurement parameters mean and Information on acoustics in general. The near real time monitoring data can be found at our website link: http://www.dublincitynoise.com. General information on noise, acoustics and associated links can also be found there.

Monitoring Network

The monitoring network measures continuously, 5 minute parcels of sound right throughout the year. These periods of 5 minute sound levels are then converted and presented as average hourly sound levels in decibels (dB (A)). This enables the compilation of *day, evening, night, and Lden* statistics. The averaging of measured data has been carried out logarithmically rather than normal arithmetical averaging. This is in line with the International Standards Organisation 'Recommendation 1996' in relation to long term measurements. The use of this method tends to assign a greater influence on the overall average by higher sound levels for the period being measured. For example, an arithmetical average of four sound levels such as 50dB, 50dB, 50dB and 70dB will result in a 55dB average. Averaged logarithmically these values produced a result of 64.1dB. Therefore it is critical that our sound monitors are so located that no one sound source dominates the sound measurements that could unduly skew the average ambient measurements.

Guidelines\ Standards for exposure to Ambient Sound levels

Sound emission criteria for certain sources, outside of the work environment, can be applied and enforced through Integrated Pollution Prevention Control licences, Planning Control, or Section 107-108 of the Environmental Protection Agency Act 1992. There are no legally binding statutory limits for ambient sound levels, similar to those that currently exist for air quality.

Measurement Parameters

The European Commission requires the use of a parameter called the Lden (Sound **L**evel for **D**ay, **E**vening and **N**ight) for population exposure assessment. This measurement parameter of *Day-evening-night level* is a descriptor of average daily sound levels throughout a full year, with the addition of a penalty of 5 dB (A) for evening sound (i.e. 19.00-23.00) and a penalty of 10 dB (A) for night time sound (23.00-7.00). Lden has been put forward as a single value parameter for the quantification of annoyance caused by noise. Its one drawback is that it is based on annual average calculations. Therefore, one has to have annualised data before one can use it in any assessments. Our monitoring network fulfils this criteria. Therefore, our assessments of Dublin's environmental acoustic quality is not solely dependent on mathematical computer modelling. However the Lden parameter is not a suitable parameter for the assessment of local noise complaints. Average values, or maximum\ minimum values over specific periods of time would be more suited for this use.

Areas with desirable\undesirable or low\high sound levels

The Dublin City Council Noise Action Plan December 2013 – November 2018 proposes that areas with undesirable high sound levels are areas with a night time sound level greater than 55 decibels and a daytime level greater than 70 decibels. It also proposes that areas with desirably low sound levels are defined as areas with a night time level less than 50 decibels and\or a daytime level less than 55 decibels.

The World Health Organisation Night Noise Guidelines (NNGL) for Europe

These guidelines propose a **N**ight **N**oise **G**uideline (NNGL) ultimate target of 40dB Lnight outside. An interim target (IT) of 55 dB Lnight, outside is recommended '*in the situations where the achievement of the NNG is not feasible in the short run for various reasons*' - WHO.

Data Loss

Loss of data is mainly due to the drifting of the calibration of the microphones or power failure at a site. Data which could not be verified with monitor calibration was discarded. There was no instance of vandalism at any of the sites.

Sound Sources

Since commissioning our network in 2009, the measurements indicate that under normal conditions the dominant sound source in Dublin is traffic. This sound comes from two aspects of traffic – the road surface i.e. wheel\tyre interface where sound levels increase with speed and secondly, engine\ gear change and body rattle sound, normally observed at lower speeds. The average daily summary charts (pages16 - 23) display double peaks, one between 7-9 a.m. and one between 5-7p.m. These characteristics are similarly to traffic flow patterns on major roads. The charts that do not reflect these characteristics represent areas that are influenced by more natural sounds – sites such as Bull Island.

Weather also has a major influence on sound measurements. 2016 was calmer than the previous year, 2015. In order to take into account the impact windy and wet weather can have on sound measurements the annual hourly median was compared across all individual sites and across the network as a whole. The median value is defined as the middle number in a sorted list of numbers. It is used for comparison purposes as it is not affected by outliers – i.e. abnormally high sound levels caused by high winds and rain. As can be seen in *Table 1* the median has remained remarkably stable over the years compare to the average day, evening and night time levels (Fig.2), which can vary from year to year due to differing weather conditions.

Median of Annual Hourly Sound Levels
Table 1

Sites	2012	2013	2014	2015	2016
Ballymun	62	63	63	63	63
DCC Rowing Club	54	55	55	55	54
Navan Rd	54	54	54	55	54
Ballyfermot	56	56	56	56	56
Drumcondra	53	55	55	55	54
Raheny	55	56	53	54	55
Ringsend	49	51	50	50	50
Bull Island	48	50	50	49	50
Walkinstown	51	53	53	53	52
Woodstock Gdns	46	47	47	47	46
ChanceryPk	59	61	61	61	60
Blessington Basin	50	51	51	51	51
Dolphins Barn	0	0	57	57	57
Mellowes Park	0	0	57	57	57
Network	53	54	55	55	54

These weather episodes are picked up as high sound levels in the hourly and monthly summary charts, (pages 25 -109). The measurements for Bull Island and Blessington Basin, which are designated as ‘Quiet Area’ displayed relatively high sound levels during these weather episodes. It is therefore important to note comments already made in relation to differences between noise levels and sound levels.

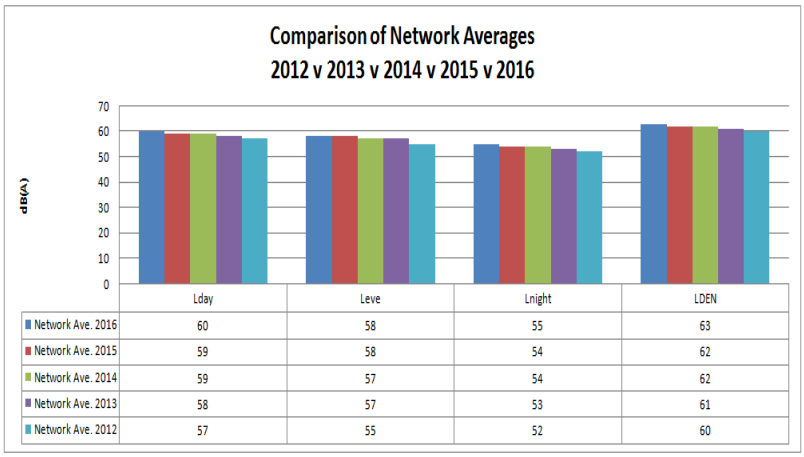
The monitoring site locations are displayed on maps to the rear of this report and provide an indication as to the type of areas in which they are situated. Ringsend, Bull Island and Blessington Basin, tend to display more erratic sound levels. This could possibly be due to the lesser influence of

traffic sound sources in these areas which allows for weather to be more of a dominant influence. Both Bull Island and Blessington Basin sites are designated 'Quiet Areas' and monitoring at these locations will continue into the foreseeable future in order to assess any deterioration in ambient sound levels.

Summary of Results

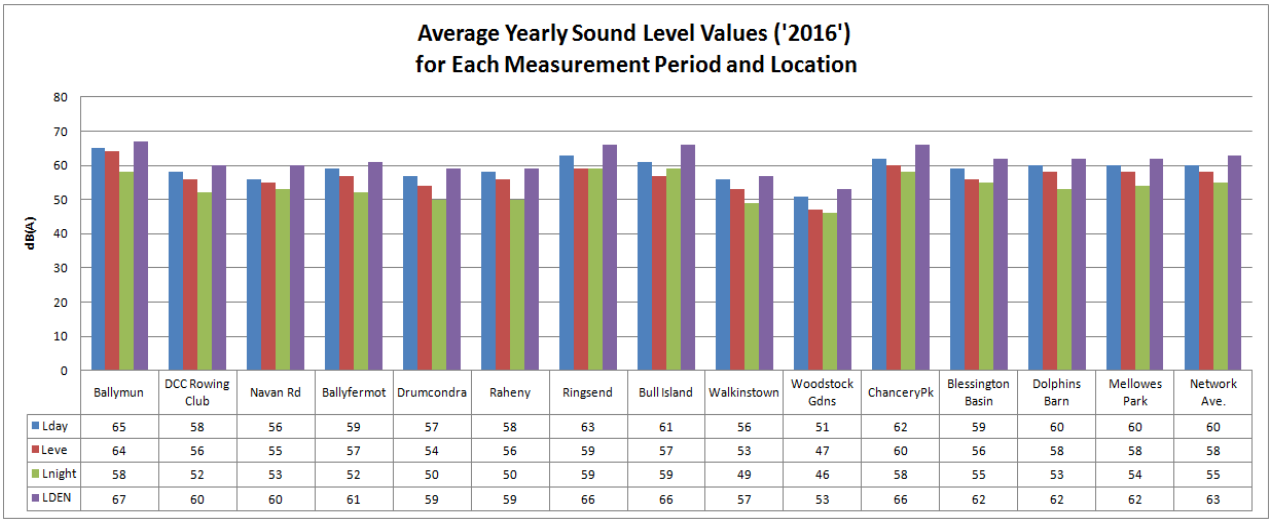
Set out in *fig.2* is a comparison of the Network averages from 2012 to 2016. There was an increase of one decibel in day time, night time and LDEN levels for 2016. *Fig. 3* provides more detail on individual site measurements. The measurements for the year 2016 indicate that four locations – Ballymun, Ringsend, Chancery Pk. and Bull Island exceeded the undesirable values of 55dB night, with night time values of 58dB(A), 59dB(A), 58dB(A) and 59dB(A) respectively. This also meant that the WHO NNGL interim target for exterior night time level of 55dB(A) was also exceeded at these sites, although the network average did not exceed this level. Two sites – Woodstock Gardens in Ranelagh and Walkinstown, met the desirable criteria for night time levels. This is an improvement for Walkinstown. All sites were below the undesirable daytime levels of 70dB(A). Along with Bull Island weather seemed to have a greater impact on the traditionally quieter areas measurement's such as Raheny, Ranelagh, Ringsend, and Blessington Basin, and to a lesser extent Walkinstown. See charts on pages 16 - 23.

Fig. 2



	Lday	Leve	Lnight	LDEN
Network Ave. 2016	60	58	55	63
Network Ave. 2015	59	58	54	62
Network Ave. 2014	59	57	54	62
Network Ave. 2013	58	57	53	61
Network Ave. 2012	57	55	52	60

Fig.3



	Ballymun	DCC Rowing Club	Navan Rd	Ballyfermot	Drumcondra	Raheny	Ringsend	Bull Island	Walkinstown	Woodstock Gdns	ChanceryPk	Blessington Basin	Dolphins Barn	Mellowes Park	Network Ave.
Lday	65	58	56	59	57	58	63	61	56	51	62	59	60	60	60
Leve	64	56	55	57	54	56	59	57	53	47	60	56	58	58	58
Lnight	58	52	53	52	50	50	59	59	49	46	58	55	53	54	55
LDEN	67	60	60	61	59	59	66	66	57	53	66	62	62	62	63

Measurement Results

As mention previously, the monitoring network is not a 'noise monitoring' network. The network measures and monitors actual sound - from all sources. No assessment is made as to whether it is unwanted or not. Only when a comparison is made, for instance in this report, with some valid criteria, can a judgement be made as to whether the sound levels are desirable or not. Bull Island is a case in point. It has produced some of the highest measured sound levels of all the monitoring locations. This is due to high winds and rolling waves. Therefore it has to be borne in mind that the ambient sound monitoring network measures all sound from all sources thus giving an indication of the amount of sound - not noise, the general population is exposed to from the hustle and bustle of daily life.

The continuous measurements from all sites over the past eight years have consolidated the view that traffic is the dominant sound sources within Dublin. Hourly sound values 'shadow' traffic volumes as they vary throughout the day. This can be seen in the daily summary charts (pages 16 - 23).

Comparison of the Network Lden values with last year shows a one decibel increase in 2016 values over 2015. On an individual site by site comparison, the Lden for Ballymun, Ballyfermot, Drumcondra, Raheny, Chancery Park, and Mellowes Park were identical to last year, (2015). The Lden for all the other sites were lower, except for Ringsend and Blessington Basin.

Sound Level Variations

The average difference between day time and night time levels across the network is 5dB (A) – a consistant difference since 2010. Recent research carried out by the University of Hartford, USA on Dublin City's measurement data, over a three year period, has found that the overall average seasonal difference in average sound levels was measured to be 3.3dB(A). It found Summer and Spring months are on average 2- 3dB(A) 'quieter' than Winter months.

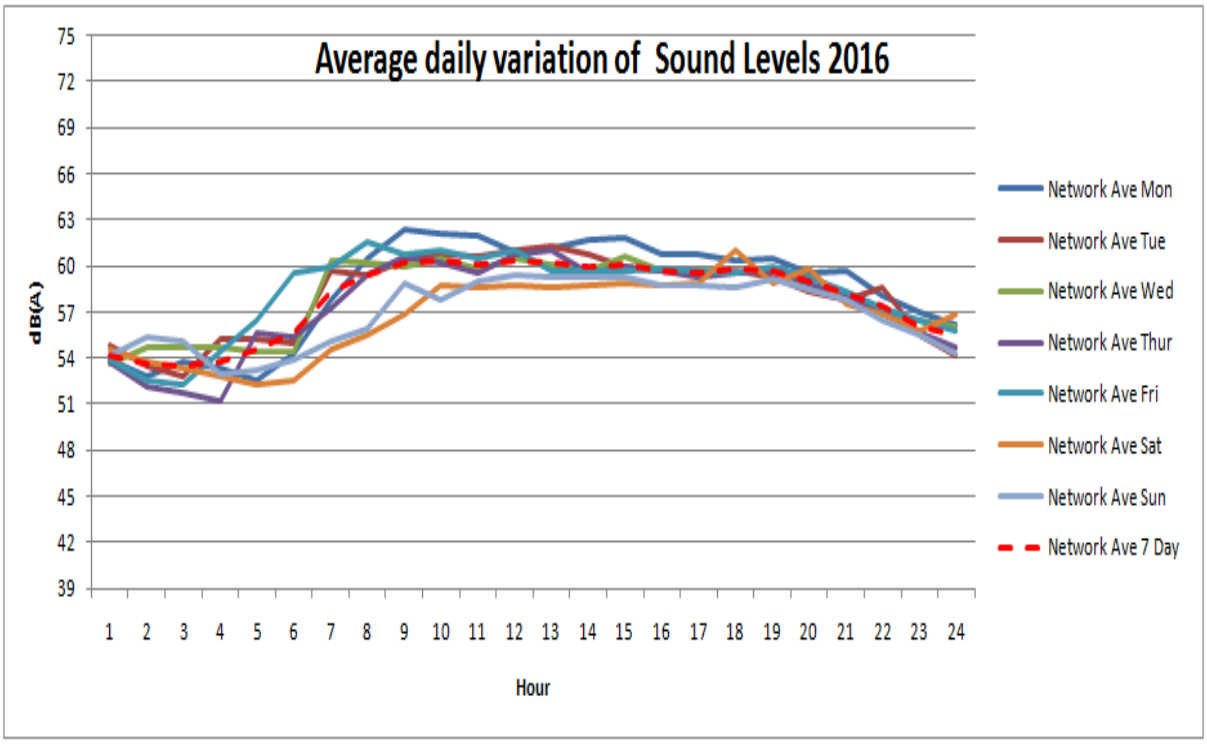
The average daily summaries '*Average LAeq'* (sound levels) provide a more detailed view of how sound levels vary from hour to hour throughout the average day and between the different days of the week. During the average weekday sound levels (along with traffic levels) start rising at 6 a.m. After approximately 9 a.m. sound levels at most sites level off until 9pm when they start to fall. It is interesting to note the more 'erratic' sound levels at Raheny, Ranelagh, Bull Island, Ringsend and Blessington Basin, where weather seemed to have a greater impact on the traditionally quieter areas measurement's - see charts on pages 16 -23.

The site with the lowest daytime sound values was Woodstock Gardens followed by Navan Road and Walkinstown, both tying for second spot. The three sites with the highest daytime sound values were Ballymun, Ringsend and Chancery Park – the same as the previous three years except for Ringsend which is a new entrant at this level. The site with the lowest night time sound value was Woodstock Gardens followed by Walkinstown with Drumcondra and Raheny tying for third spot. The sites with the

highest night time sound values were, Ringsend and Bull Island tying for first place followed by Ballymun and Chancery Park tying for second place.

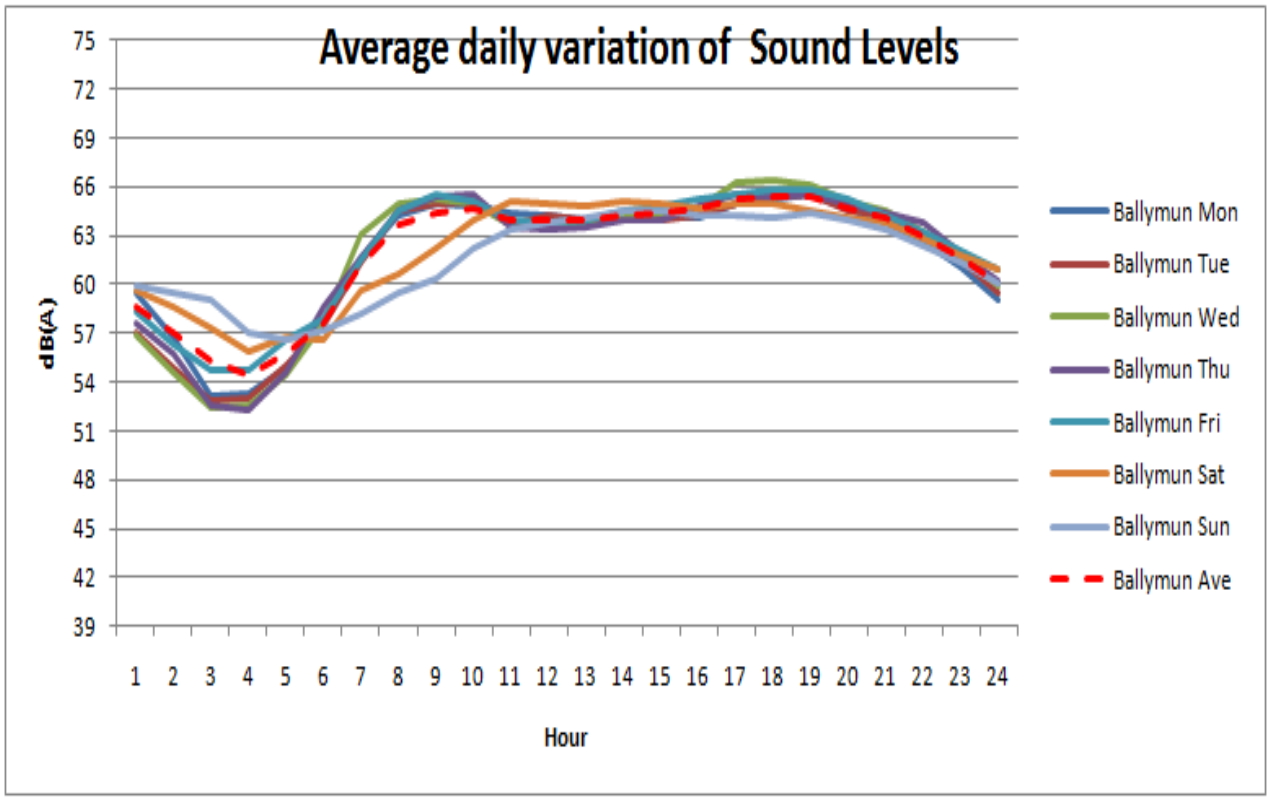
The ‘Monthly Charts’ presented to the rear of this report provide a detailed view of how average daily sound levels change from day to day and month to month. In 2016 the Network’s highest average monthly sound levels occurred in January, followed by February and March similar to last year. The Network’s average monthly lowest levels were experienced from April to September
The median value is provided in the ‘Hourly Value Charts’. This is represented by a red horizontal line which marks the mid-point of the hourly data above and below which 50% of the data resides, when arranged from the lowest value to the highest value. As already stated extreme values have less of an impact on median values than on mean (average) values.

Fig.4

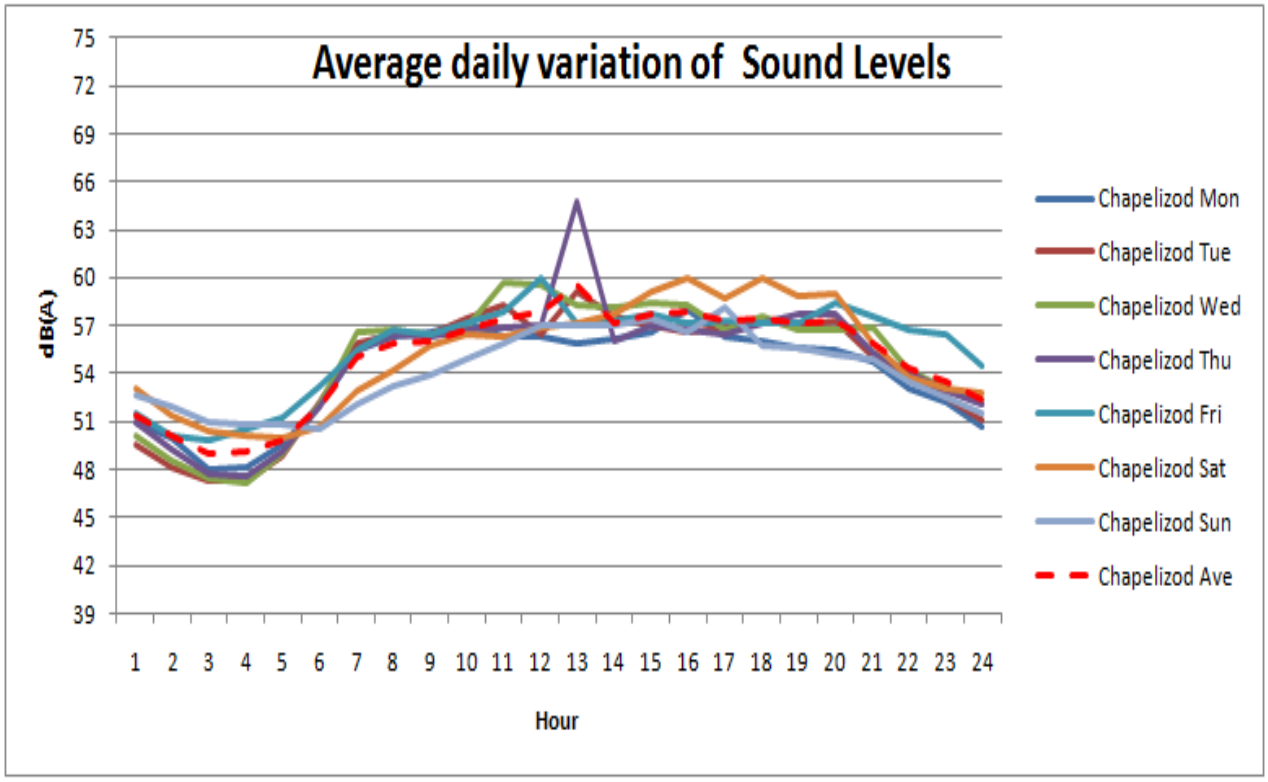


Average Daily Summary Charts

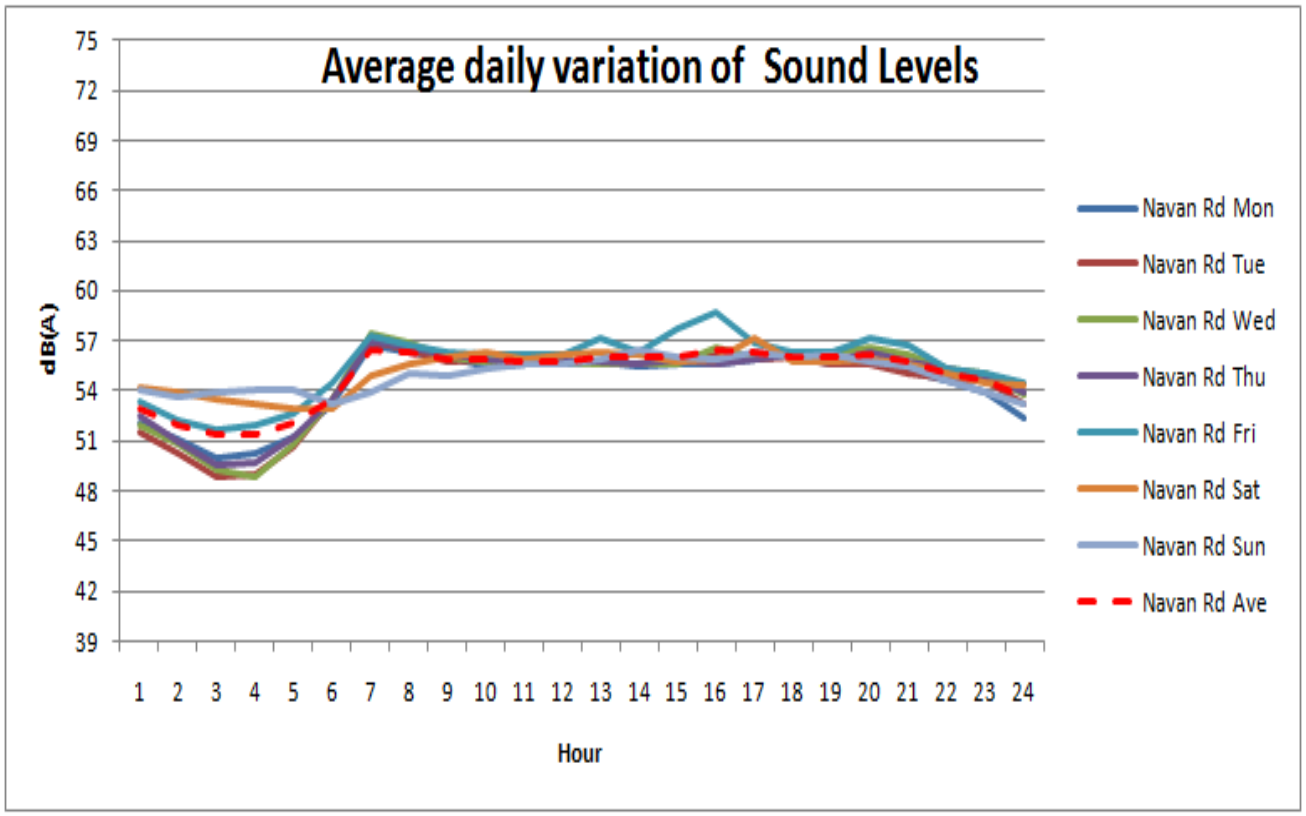
BALLYMUN



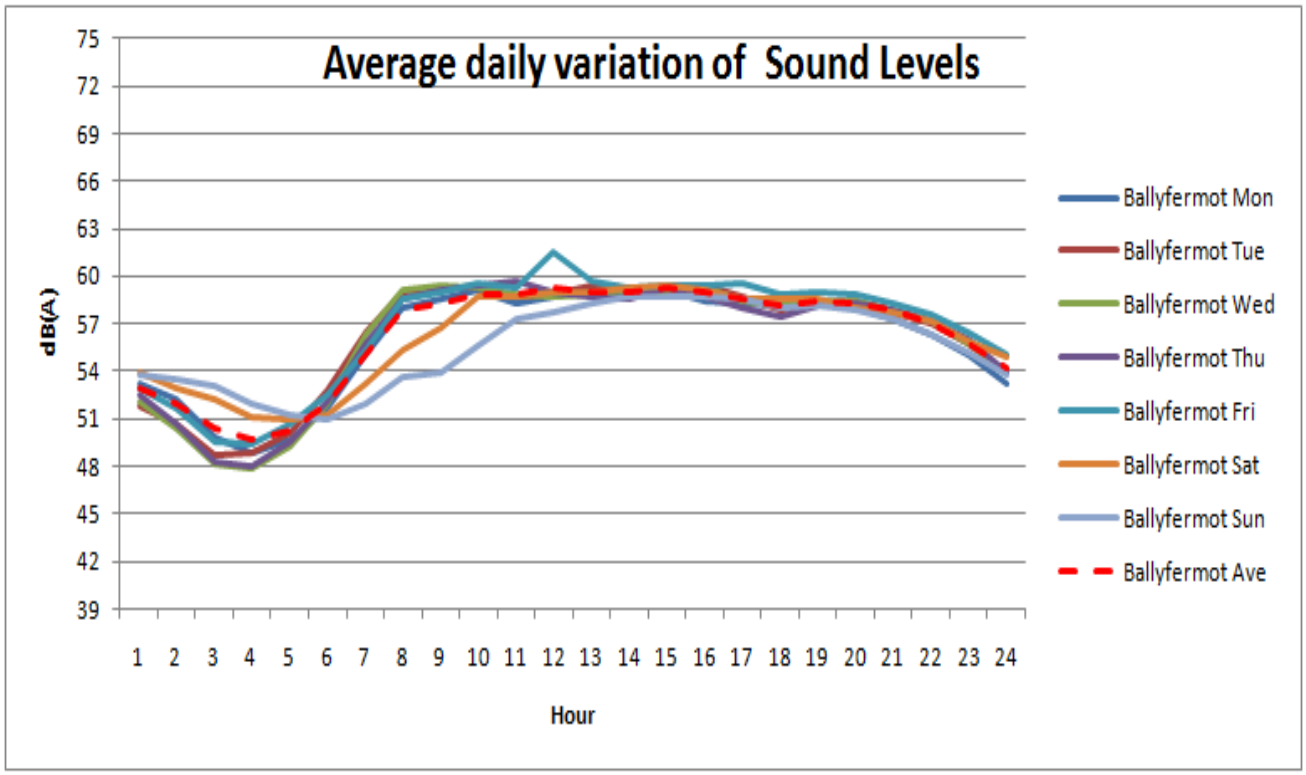
CHAPELIZOD



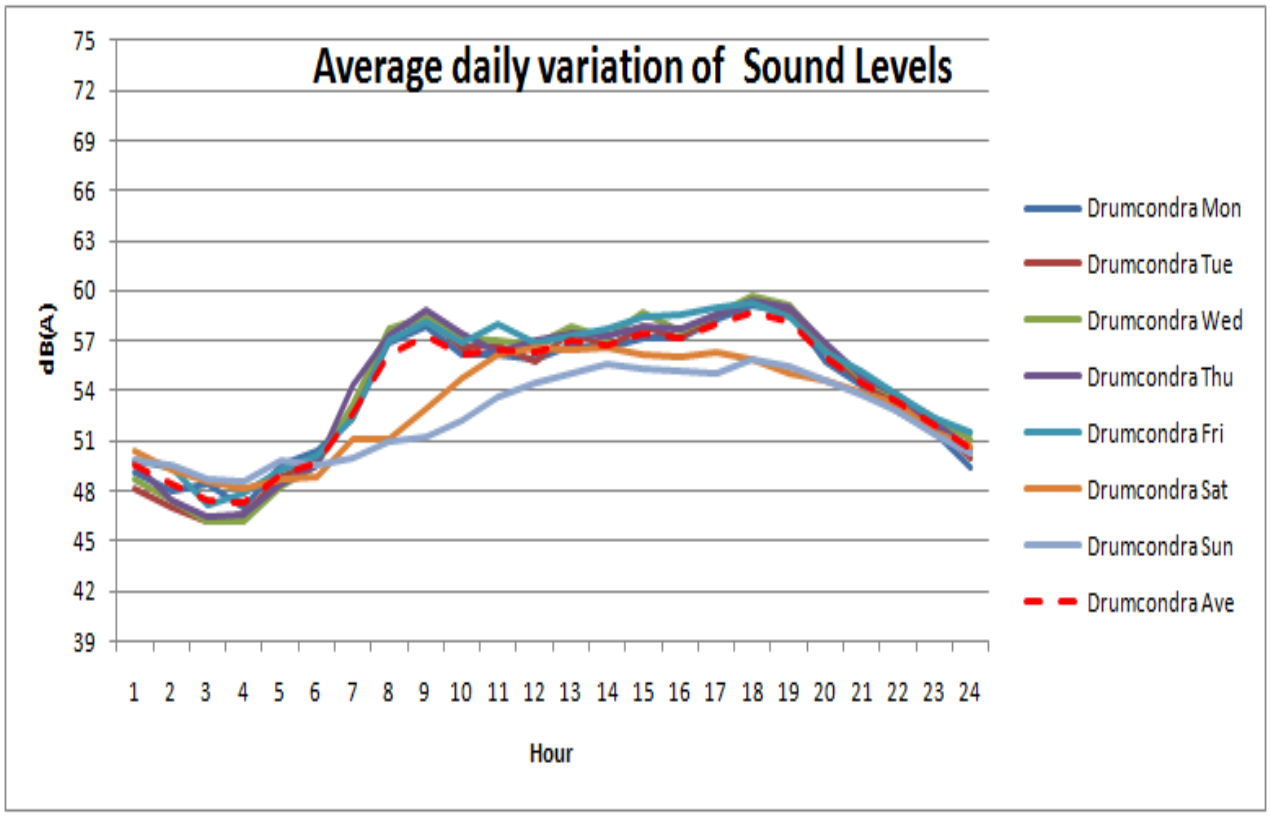
NAVAN RD.



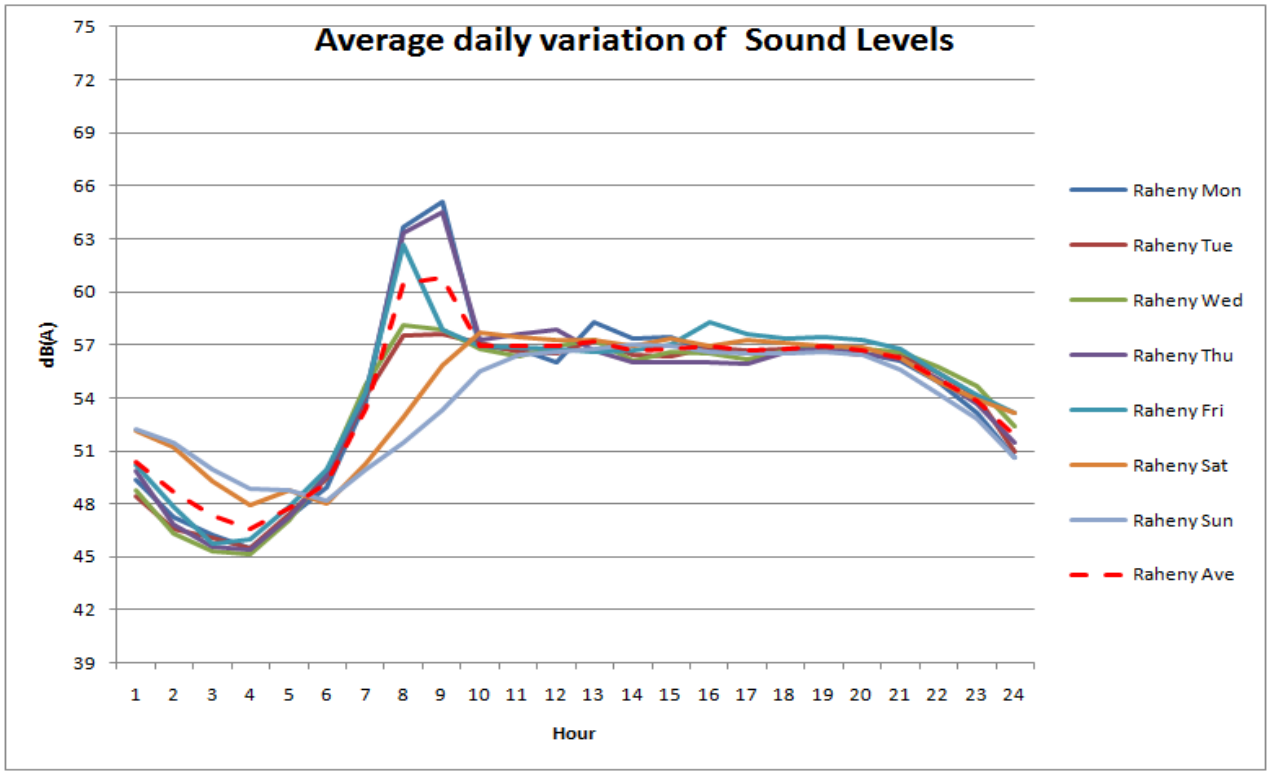
BALLYFERMOT



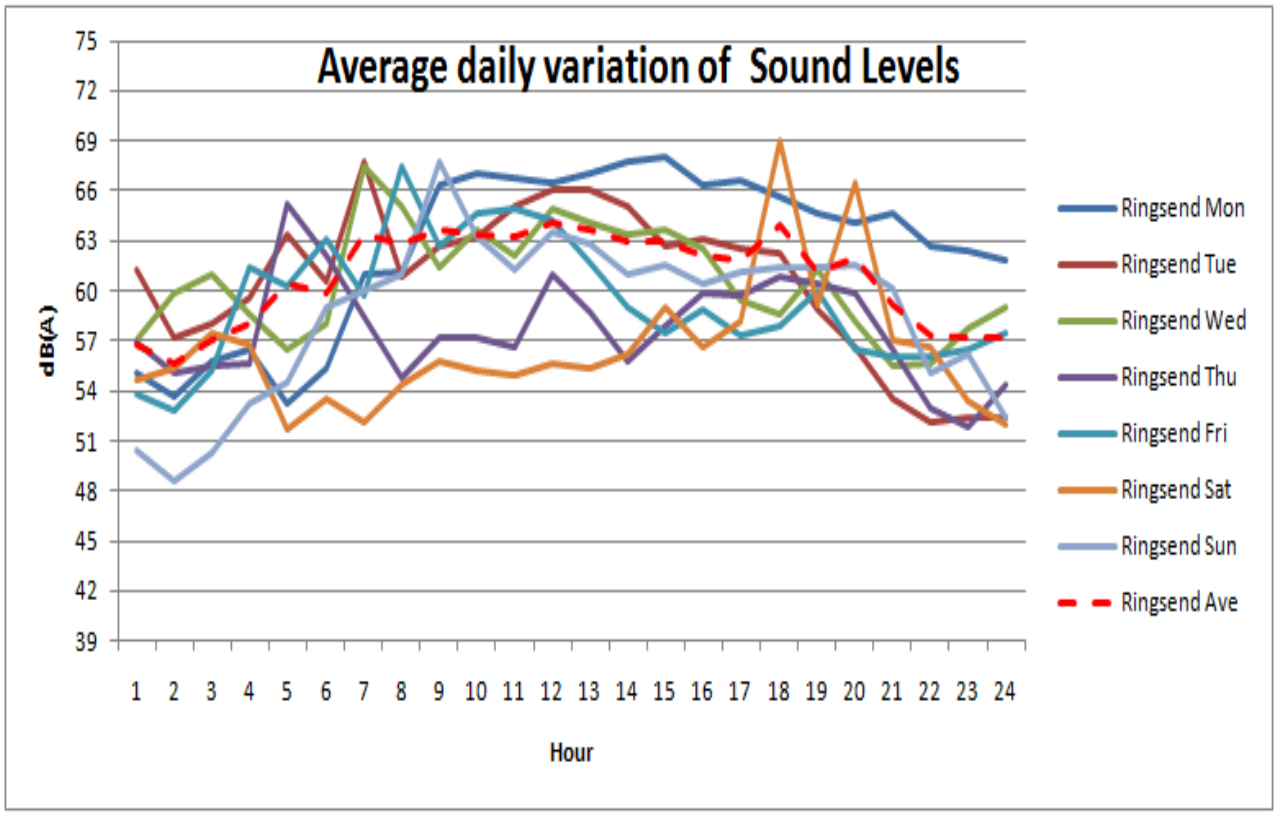
DRUMCONDRA



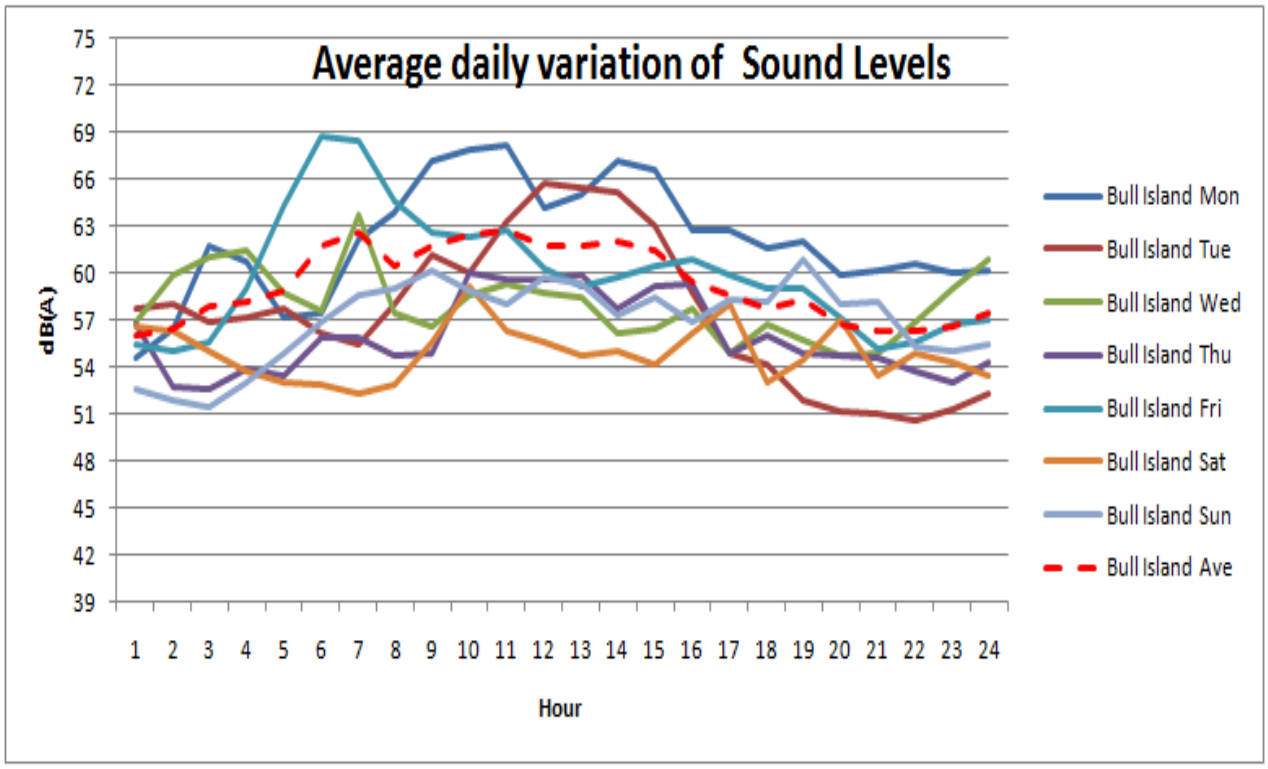
RAHENY



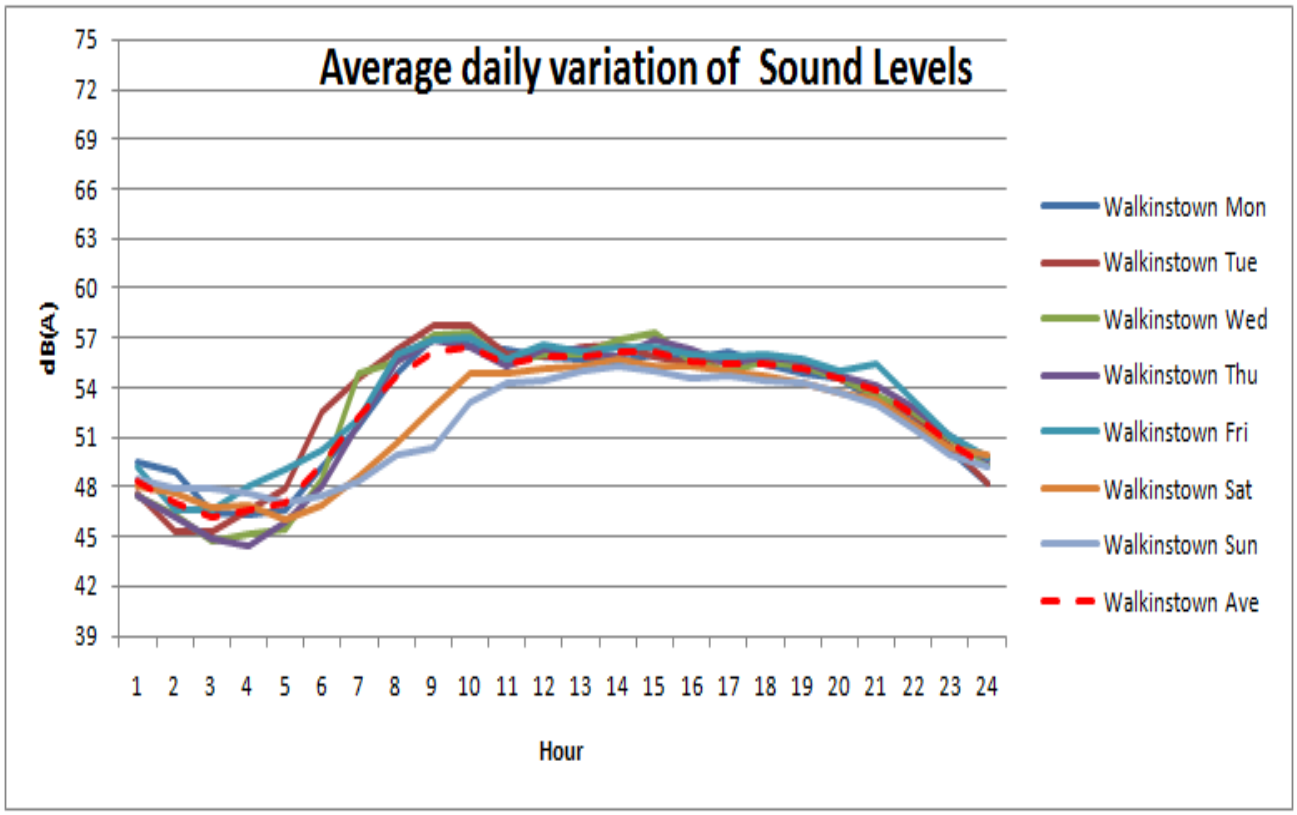
RINGSEND



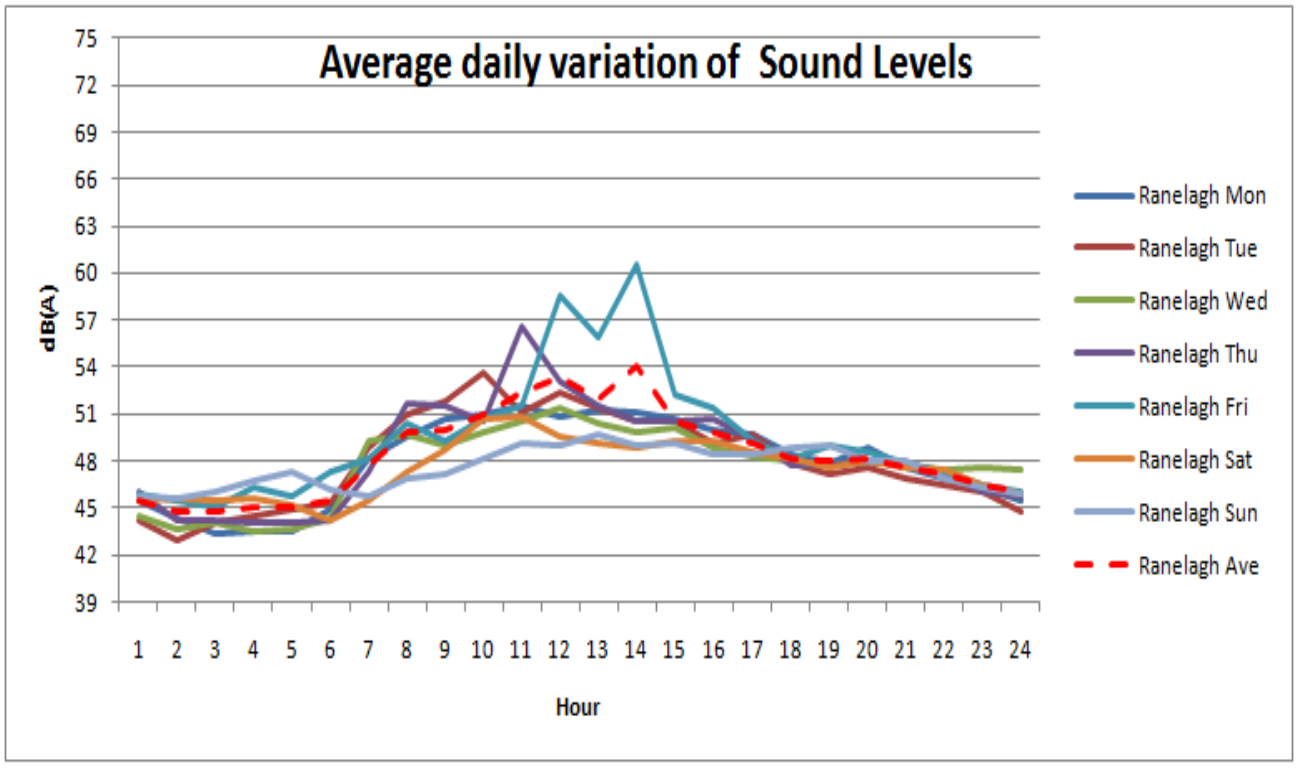
BULL ISLAND



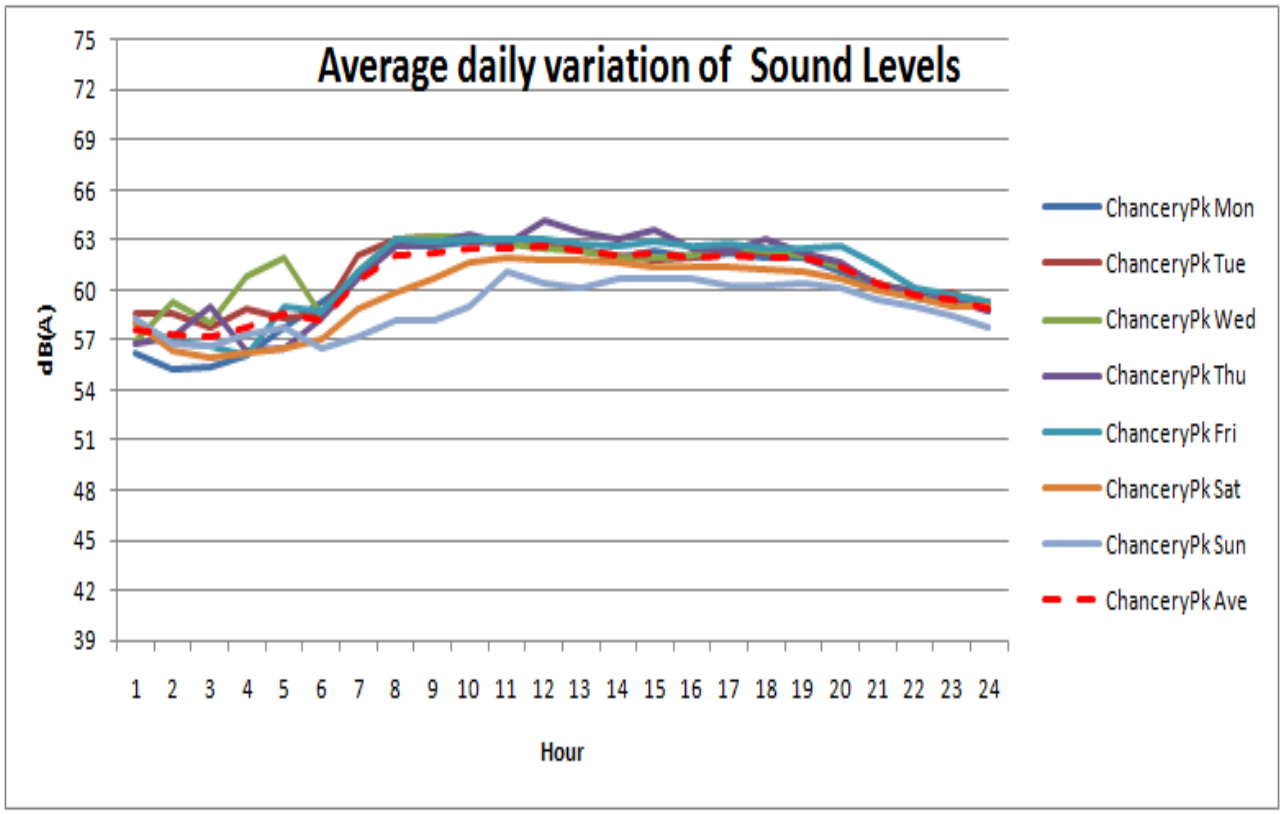
WALKINSTOWN



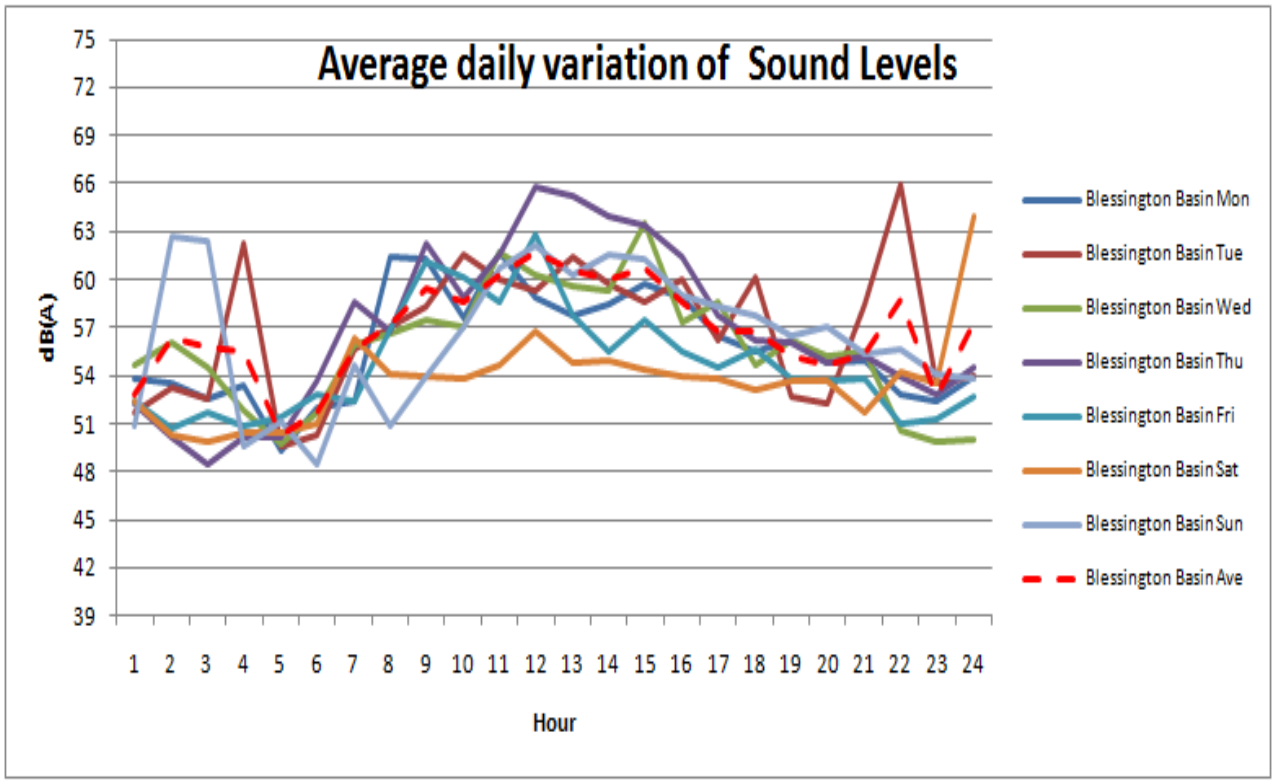
RANELAGH



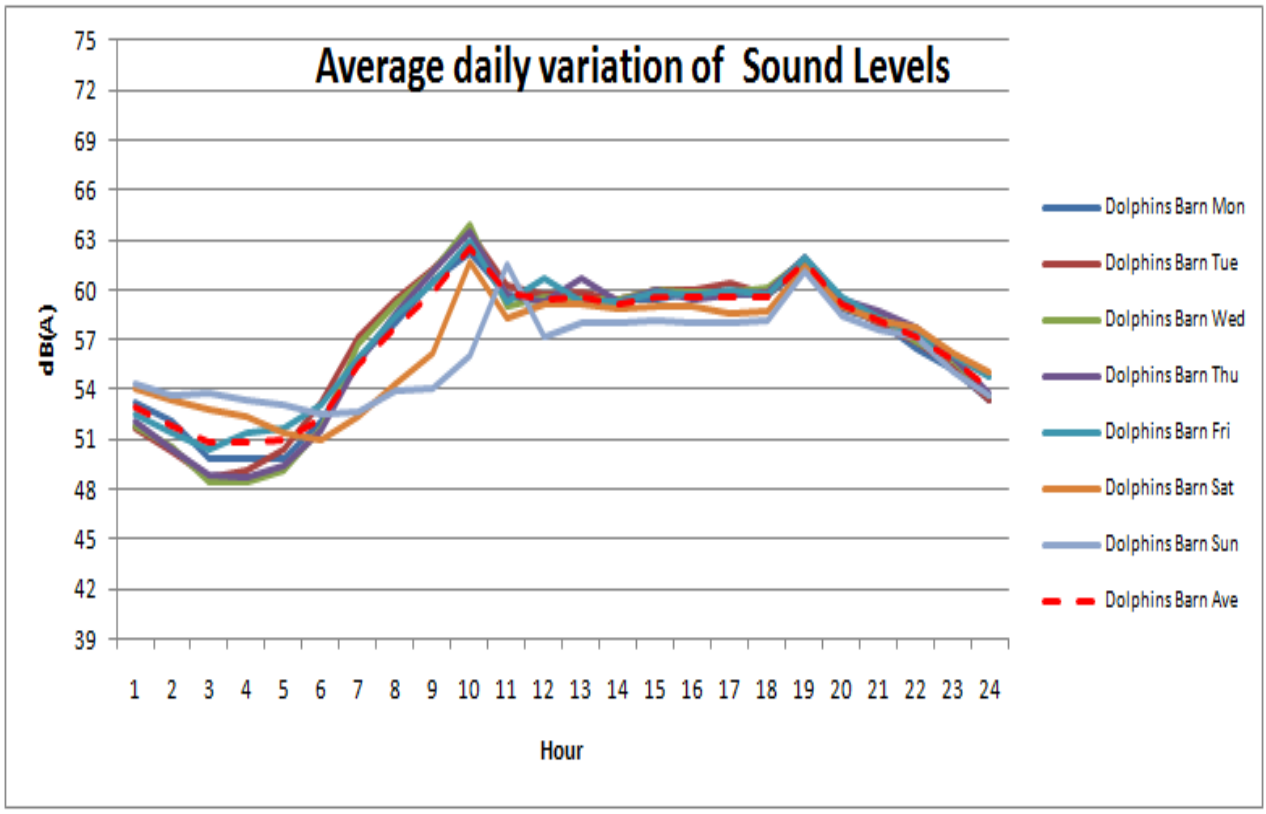
CHANCERY PARK



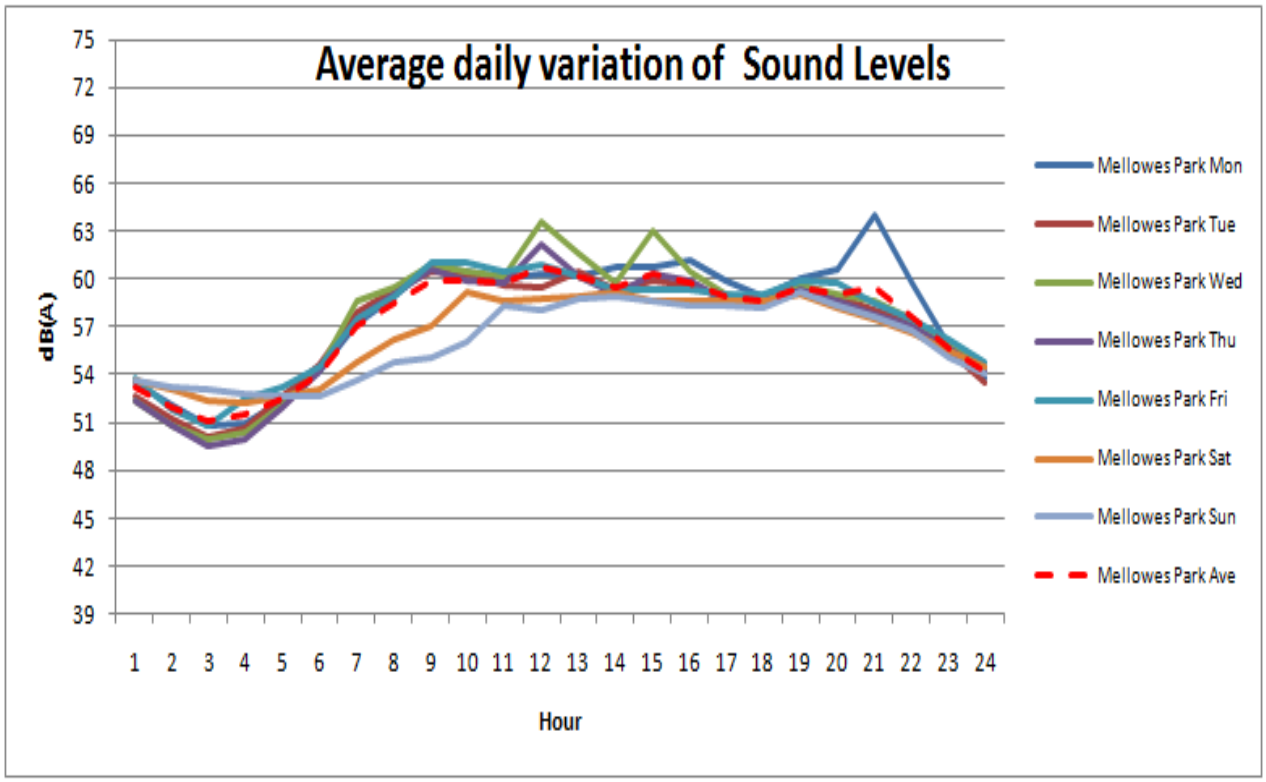
BLESSINGTON BASIN



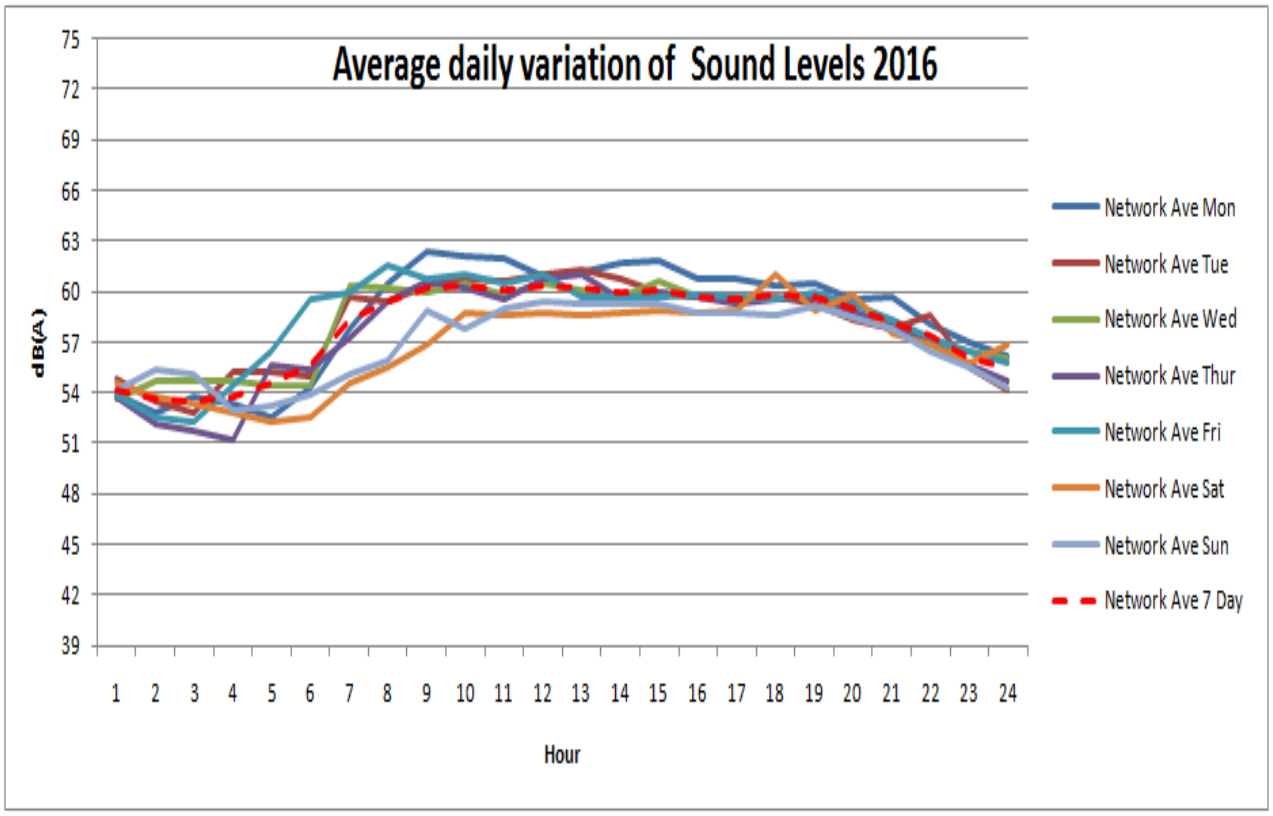
DOLPHIN'S BARN



MELLOW'S PARK



NETWORK

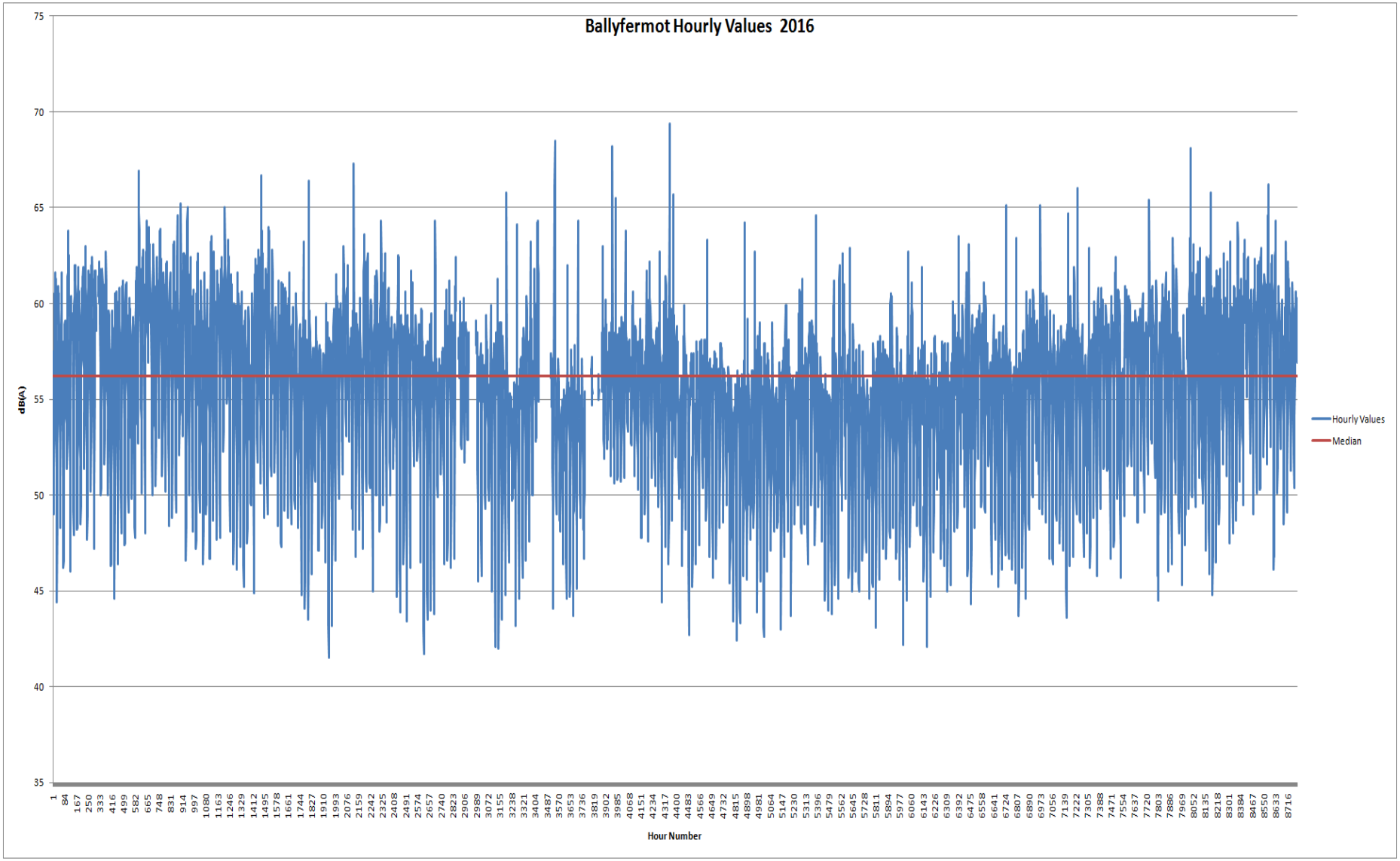

Average daily variation of Sound Levels 2016
dB(A)
75
72
69
66
63
60
57
54
51
48
45
42
39
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Hour
Network Ave Mon
Network Ave Tue
Network Ave Wed
Network Ave Thur
Network Ave Fri
Network Ave Sat
Network Ave Sun
Network Ave 7 Day

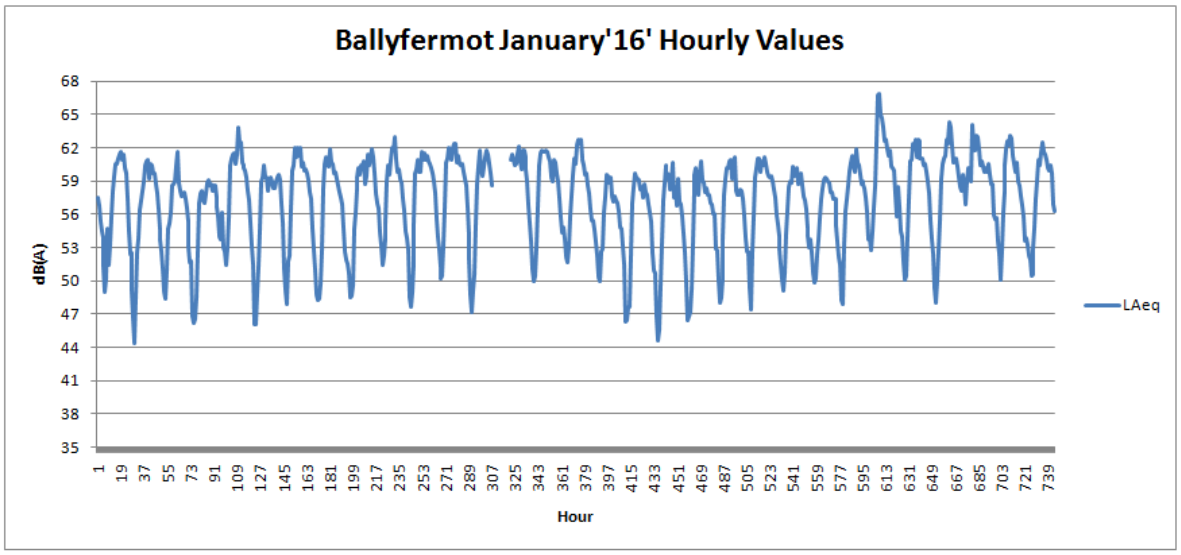
Monthly Summary Charts

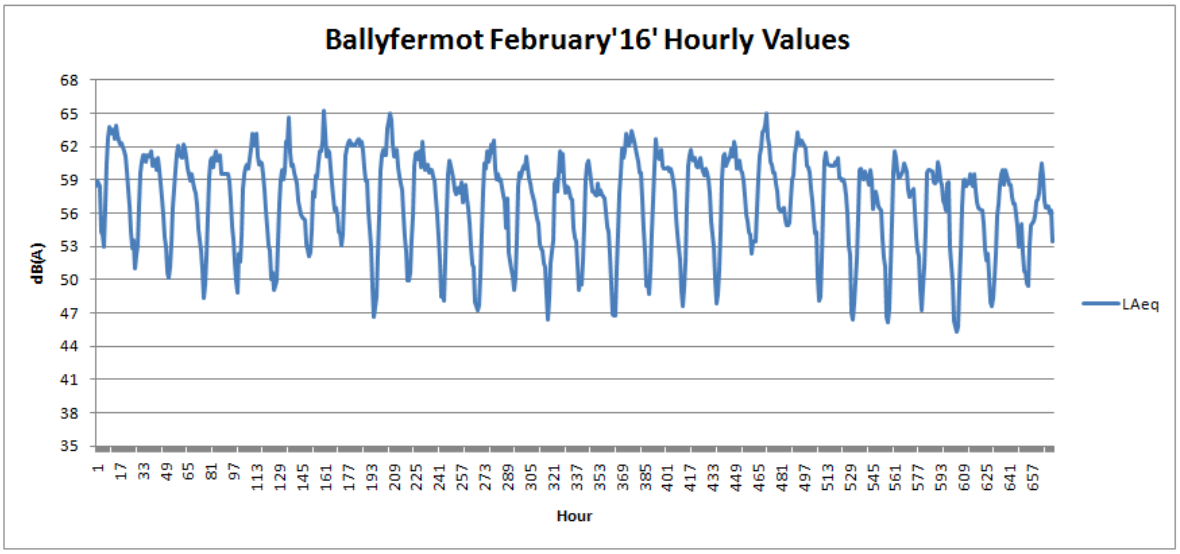
BALLYFERMOT CIVIC CENTRE

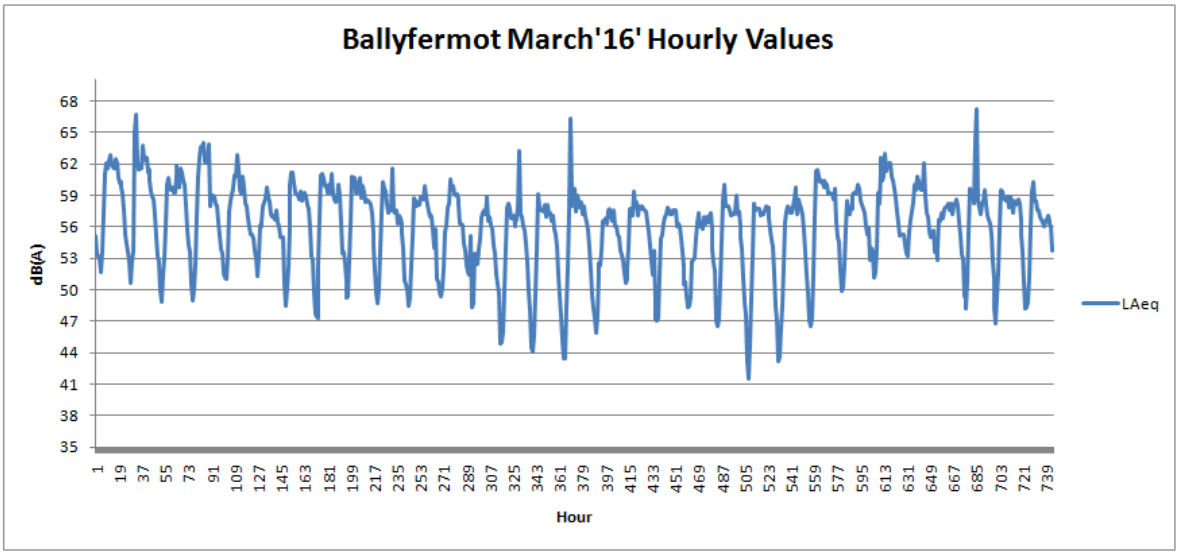
BALLYFERMOT ROAD

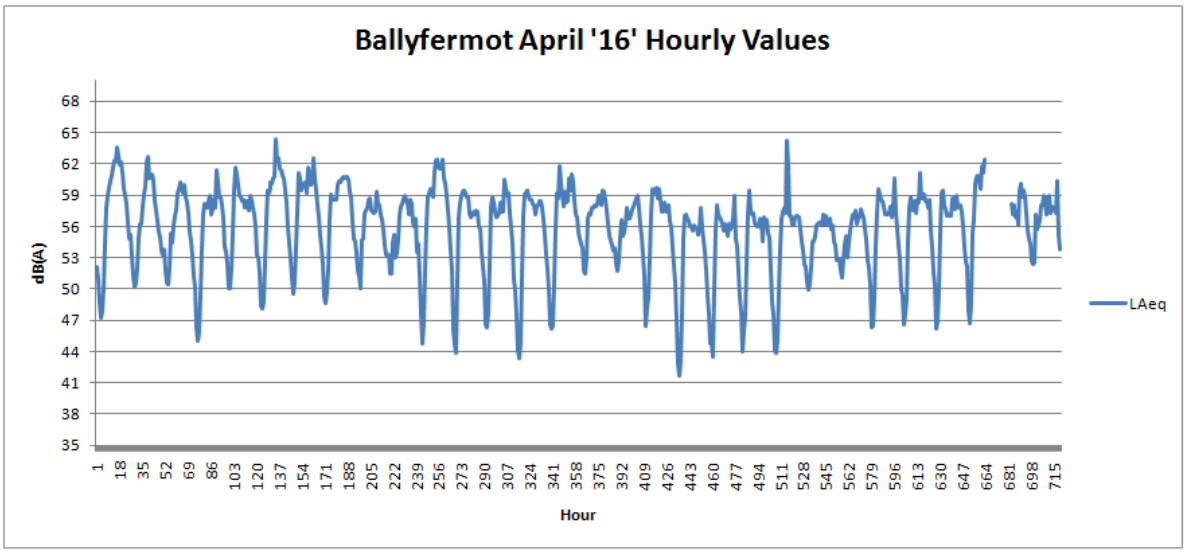
DUBLIN 10

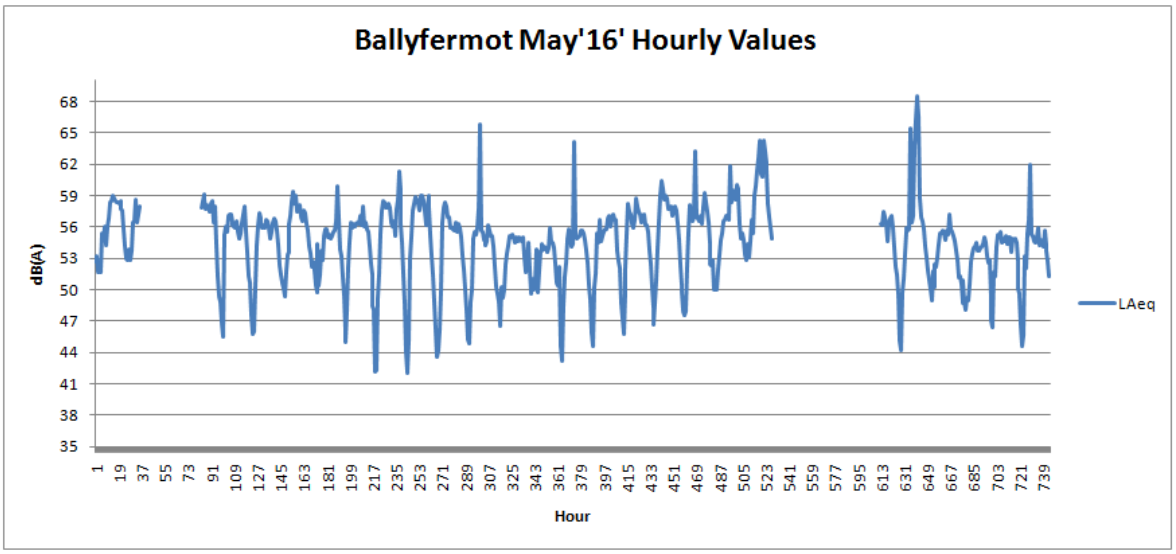

Ballyfermot Hourly Values 2016
dB(A)
Hour Number
Hourly Values
Median

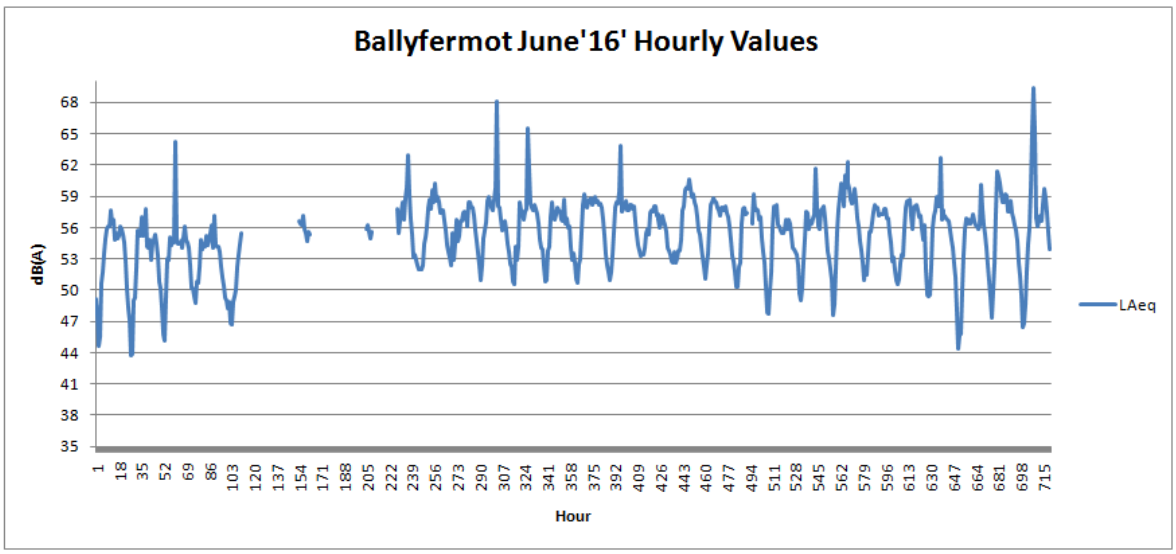

Ballyfermot January'16' Hourly Values
dB(A)
Hour
LAeq

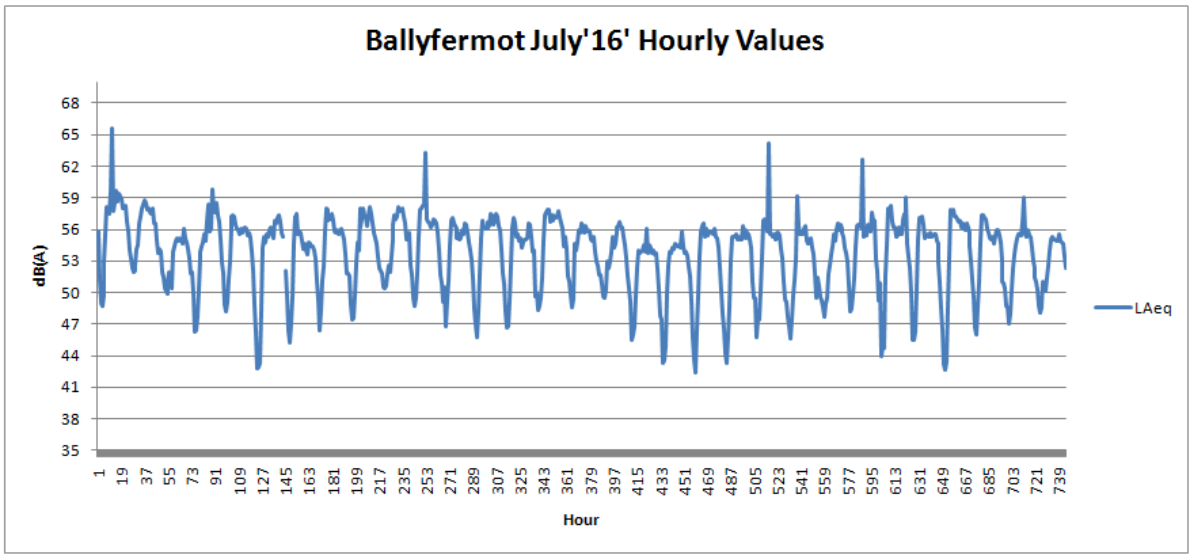

Ballyfermot February'16' Hourly Values
dB(A)
Hour
LAeq

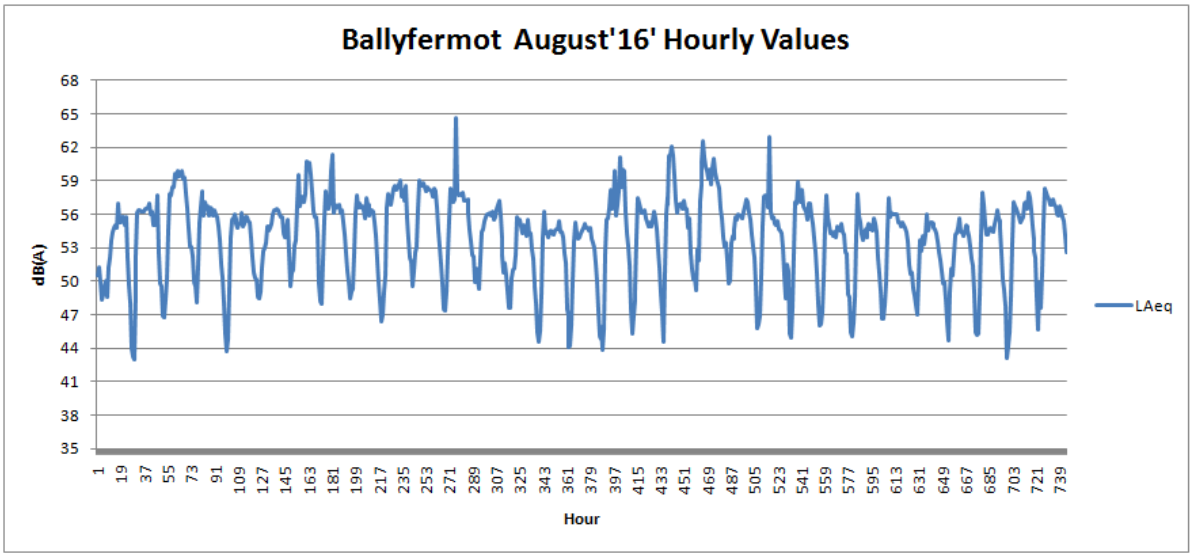

Ballyfermot March'16' Hourly Values
dB(A)
Hour
LAeq

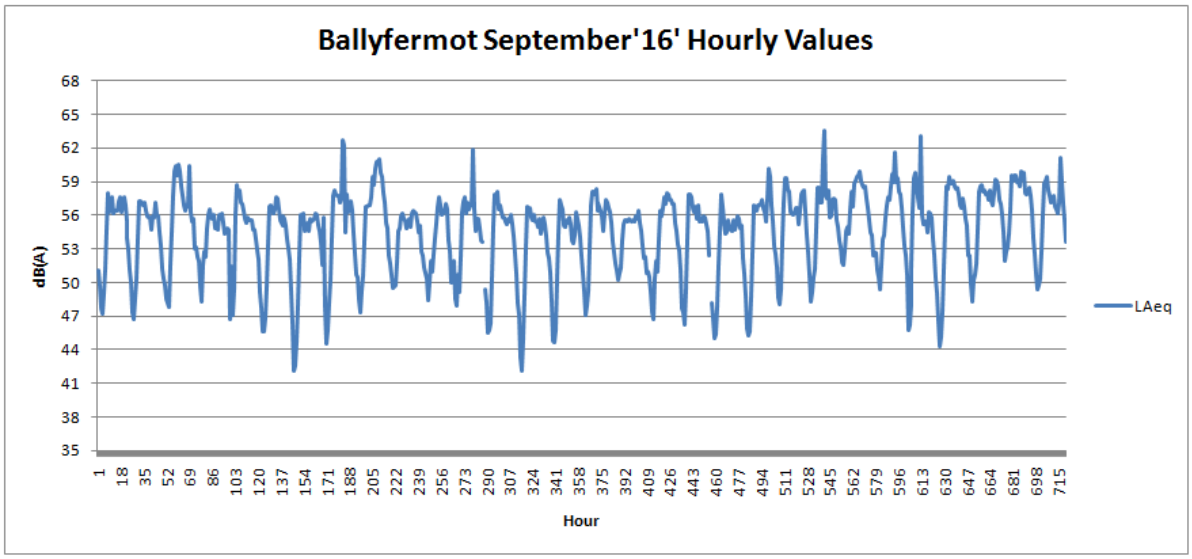

Ballyfermot April '16' Hourly Values
dB(A)
Hour
LAeq

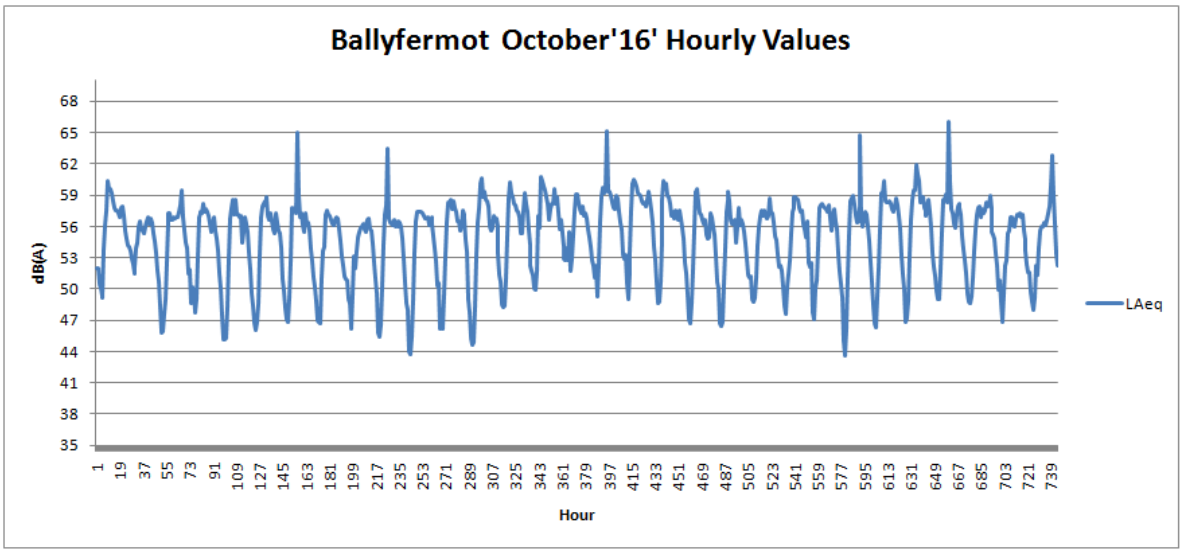

Ballyfermot May'16' Hourly Values
dB(A)
Hour
LAeq

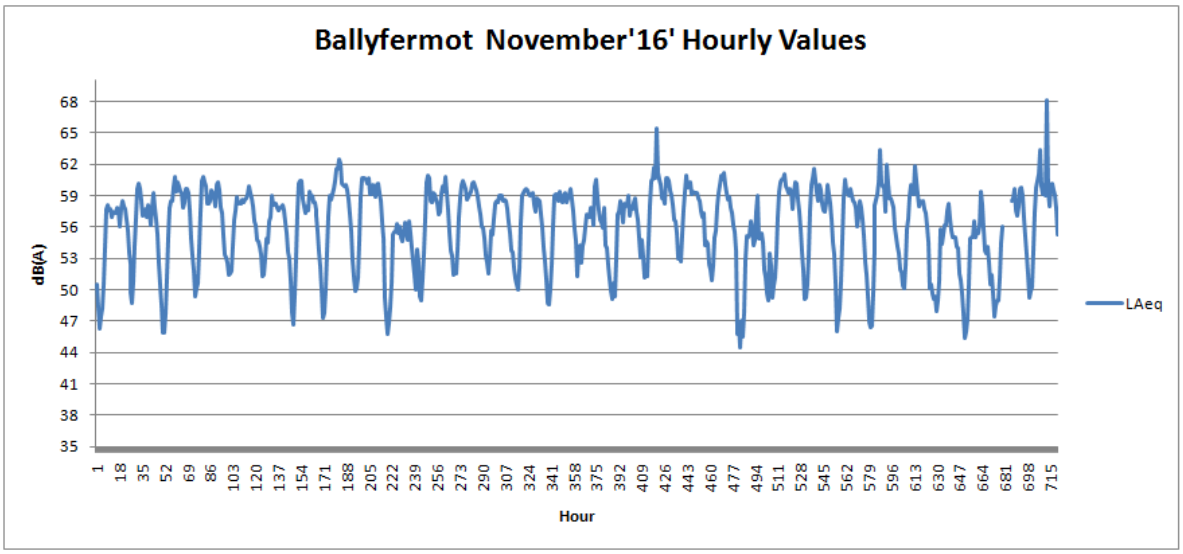

Ballyfermot June'16' Hourly Values
dB(A)
Hour
LAeq

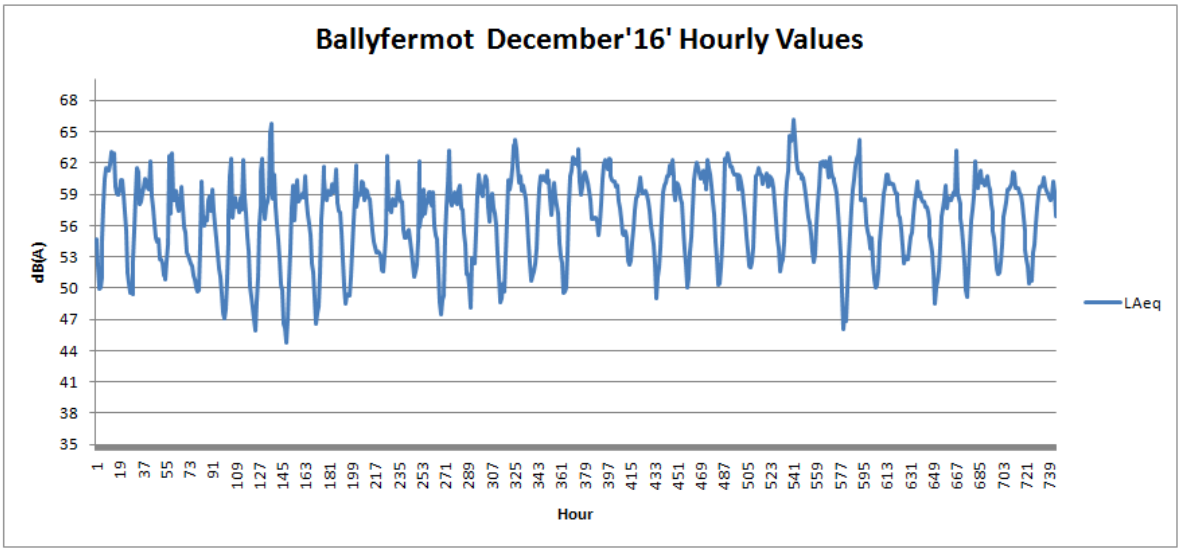

Ballyfermot July'16' Hourly Values
dB(A)
Hour
LAeq


Ballyfermot August'16' Hourly Values
dB(A)
Hour
LAeq


Ballyfermot September'16' Hourly Values
dB(A)
Hour
LAeq


Ballyfermot October'16' Hourly Values
dB(A)
Hour
LAeq

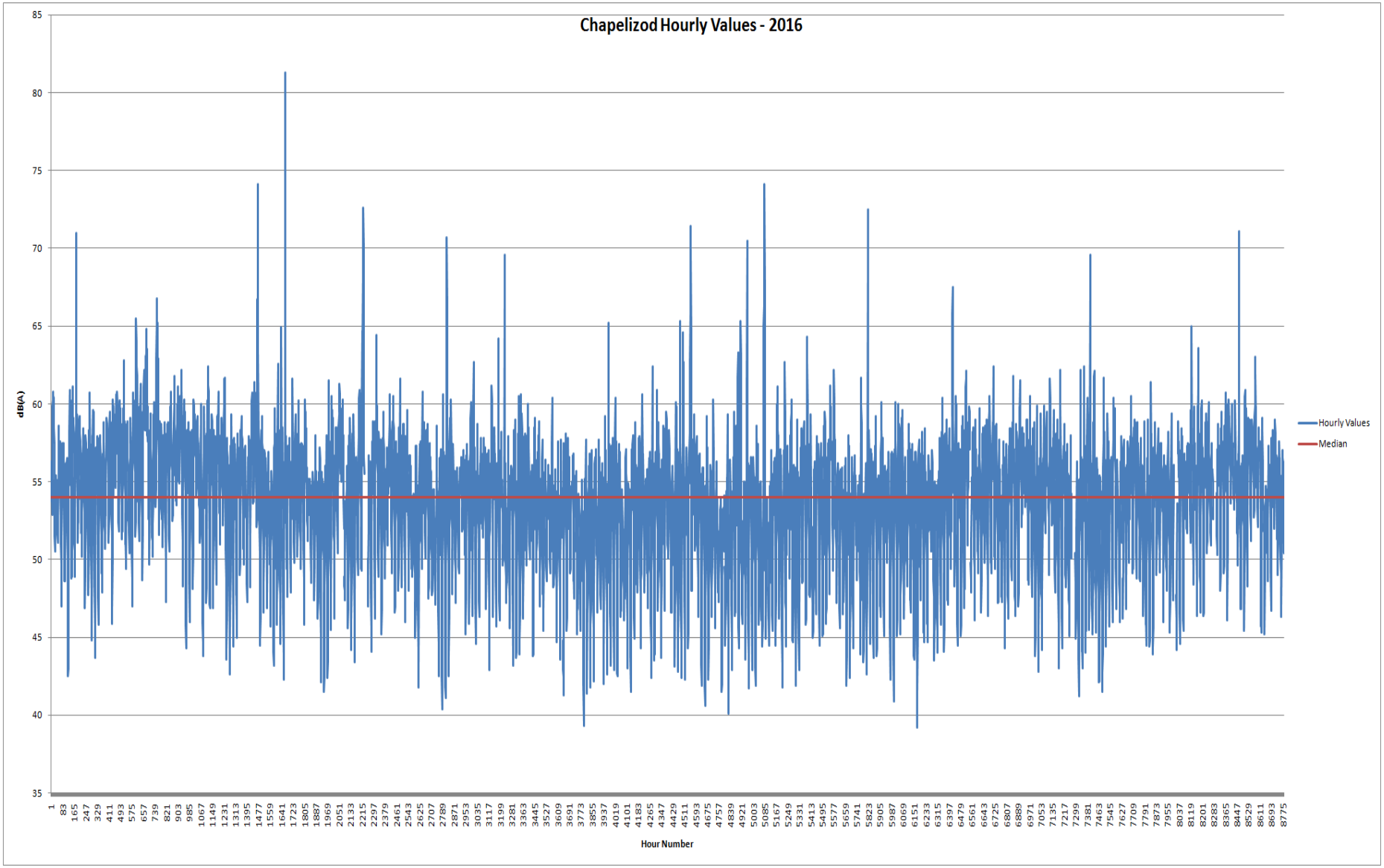

Ballyfermot November'16' Hourly Values
dB(A)
Hour
LAeq

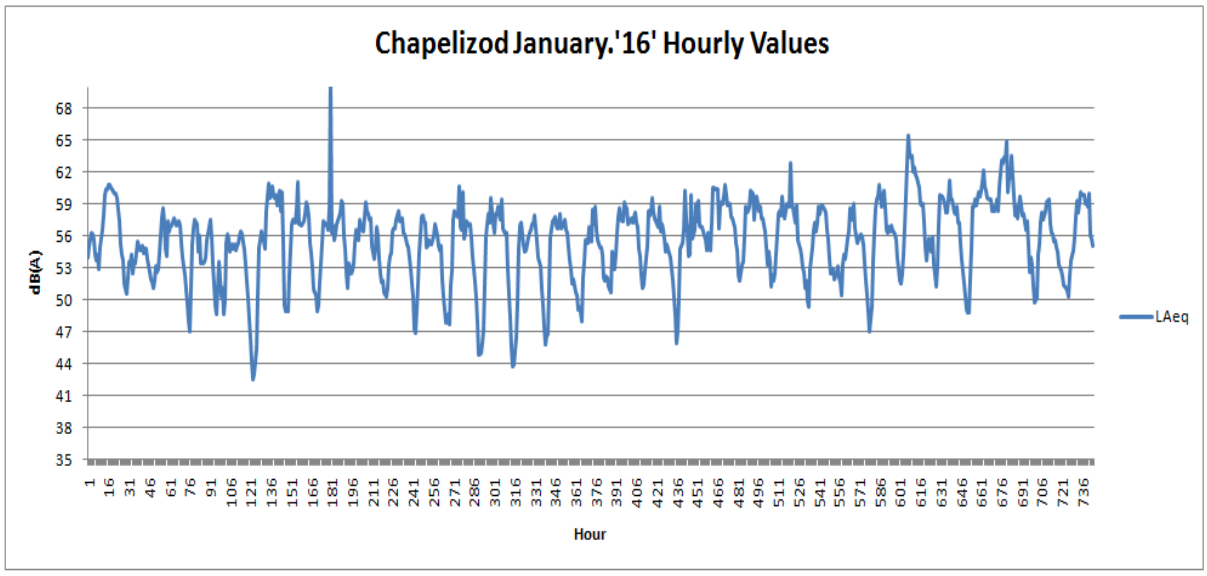

Ballyfermot December'16' Hourly Values
dB(A)
Hour
LAeq

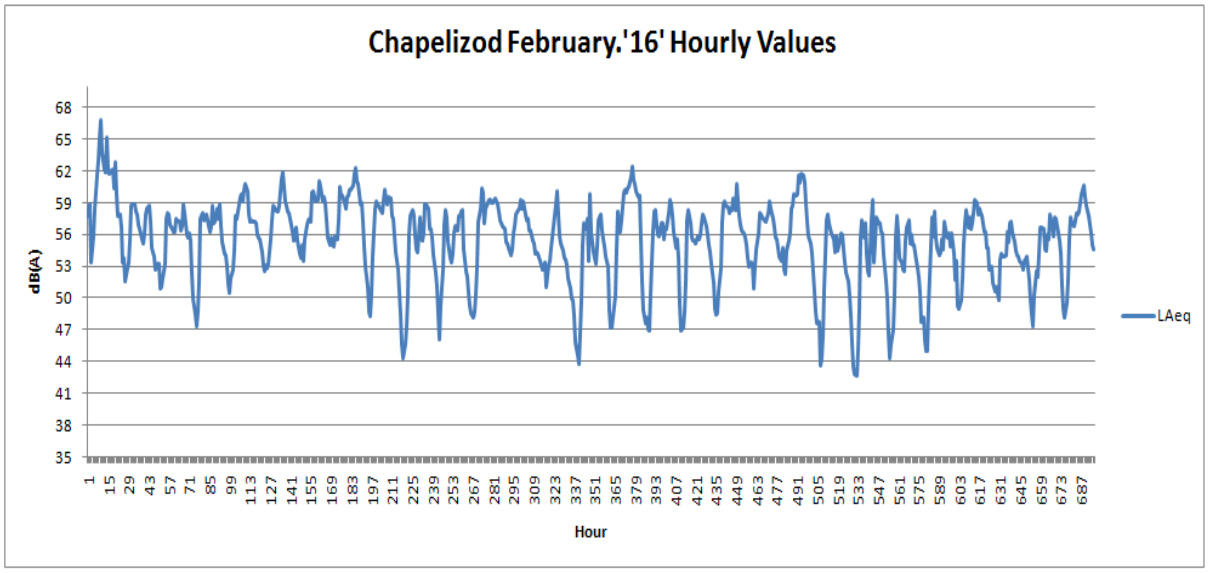
DUBLIN CITY COUNCIL ROWING CLUB

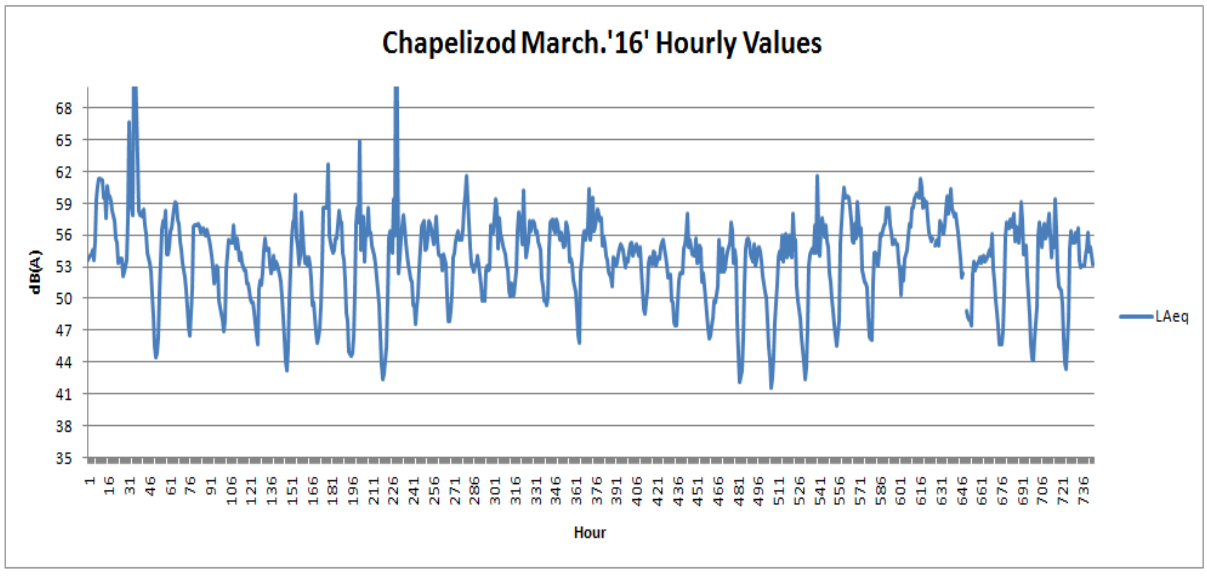
CHAPELIZOD ROAD

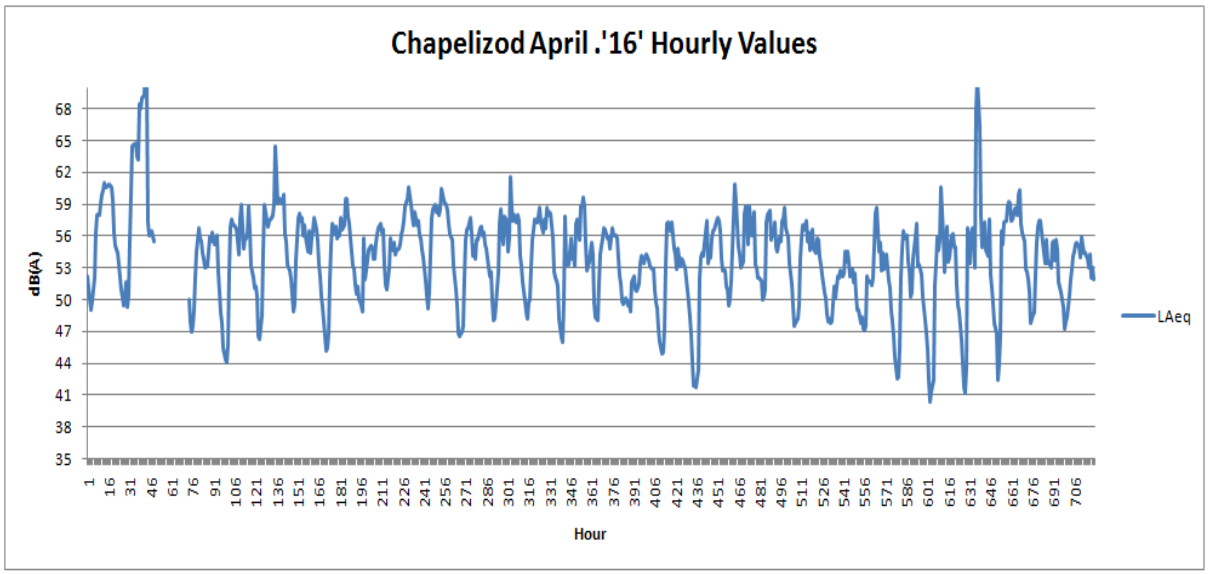
DUBLIN 8

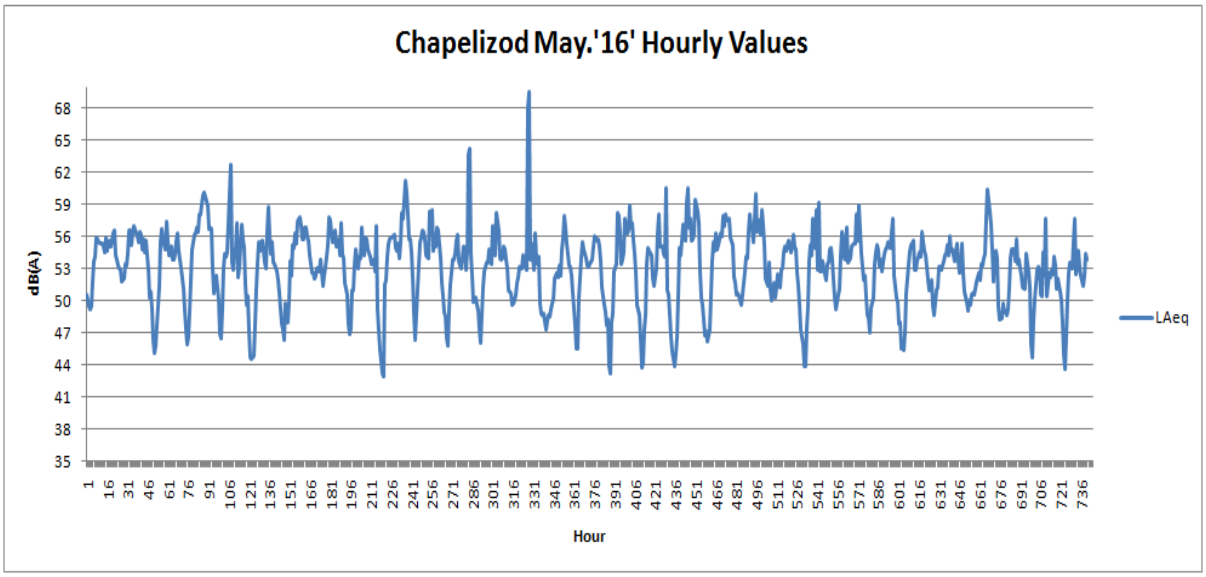

Chapelizod Hourly Values - 2016
dB(A)
Hour Number
Hourly Values
Median

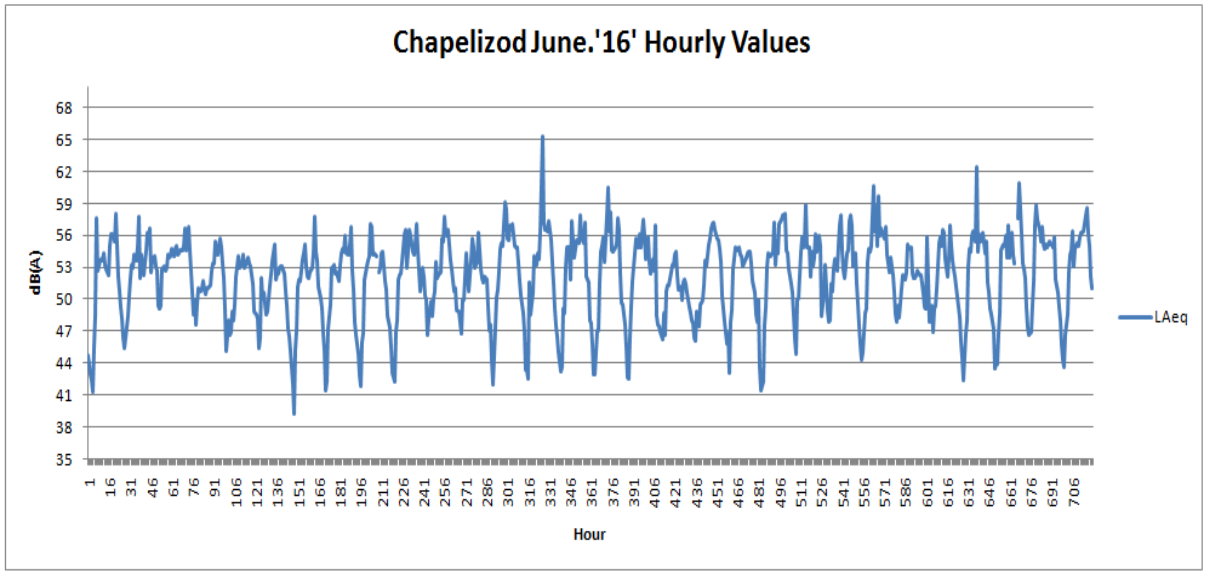

Chapelizod January.'16' Hourly Values
dB(A)
Hour
LAeq

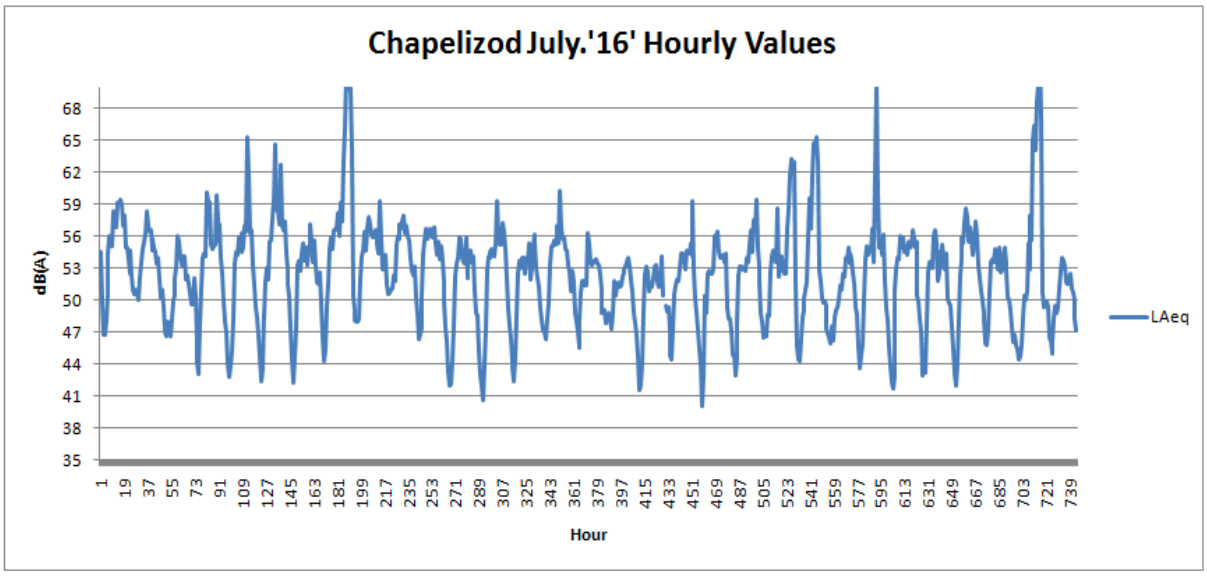

Chapelizod February.'16' Hourly Values
dB(A)
Hour
LAeq

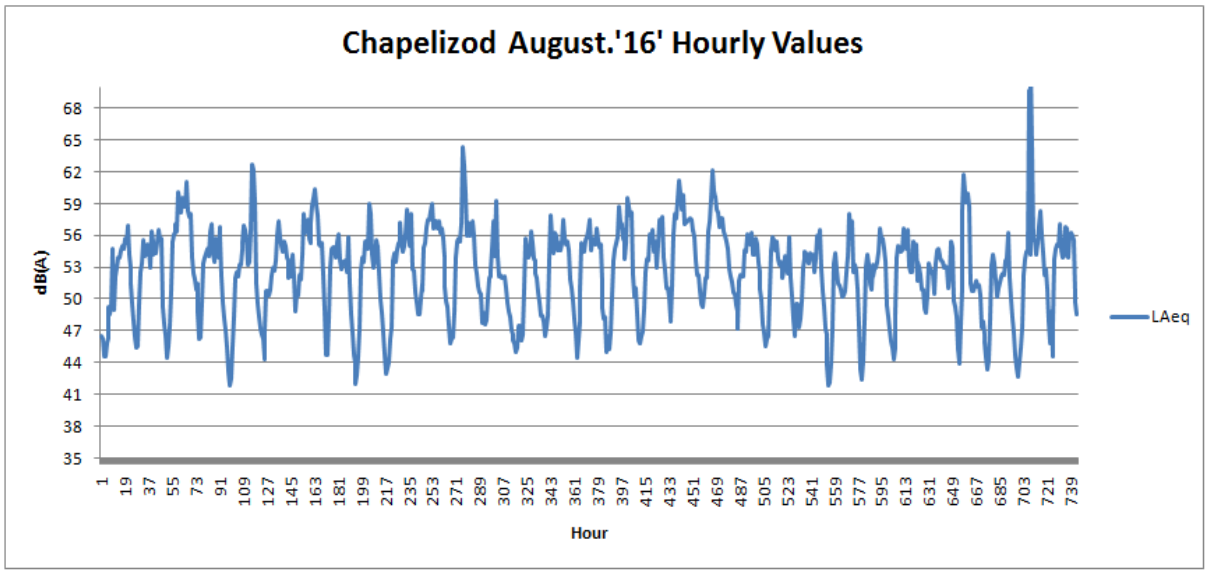

Chapelizod March.'16' Hourly Values
dB(A)
Hour
LAeq

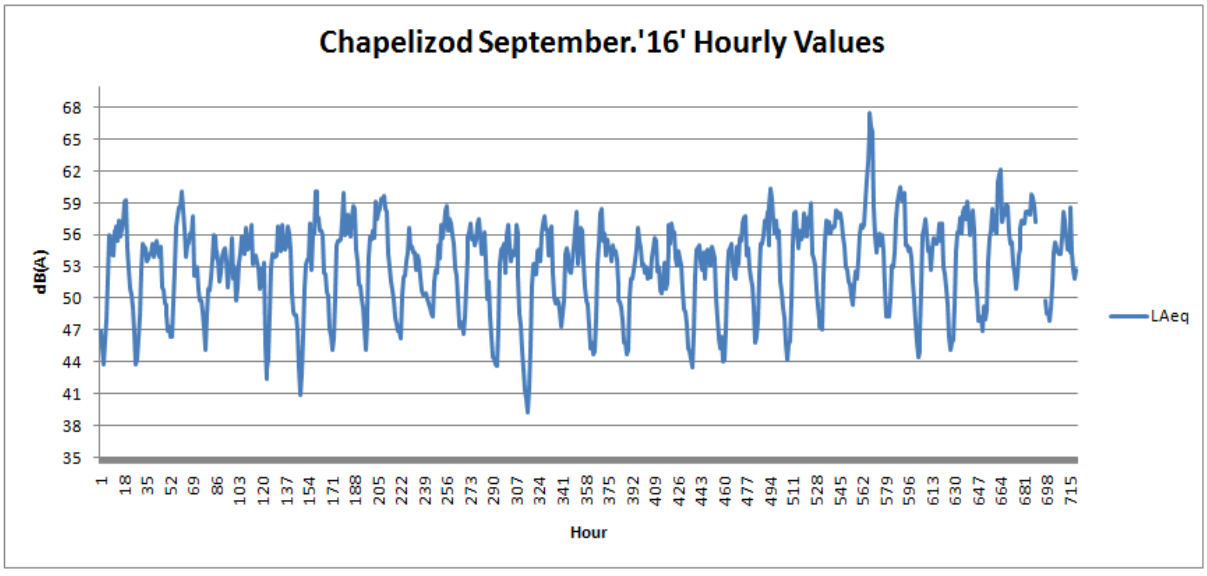

Chapelizod April .'16' Hourly Values
dB(A)
Hour
LAeq

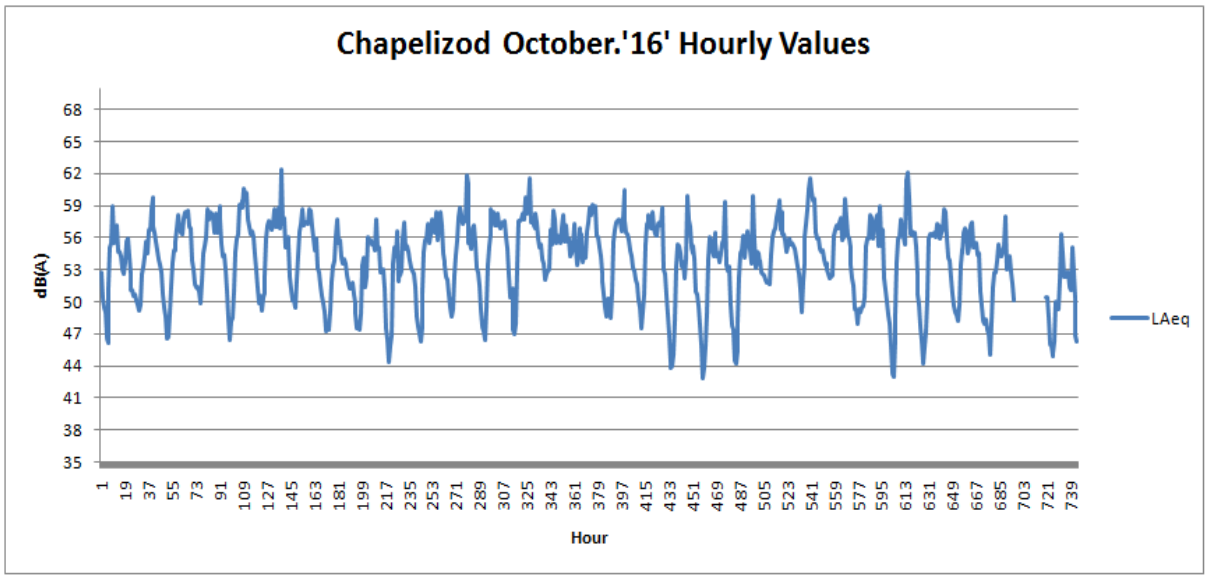

Chapelizod May.'16' Hourly Values
dB(A)
Hour
LAeq

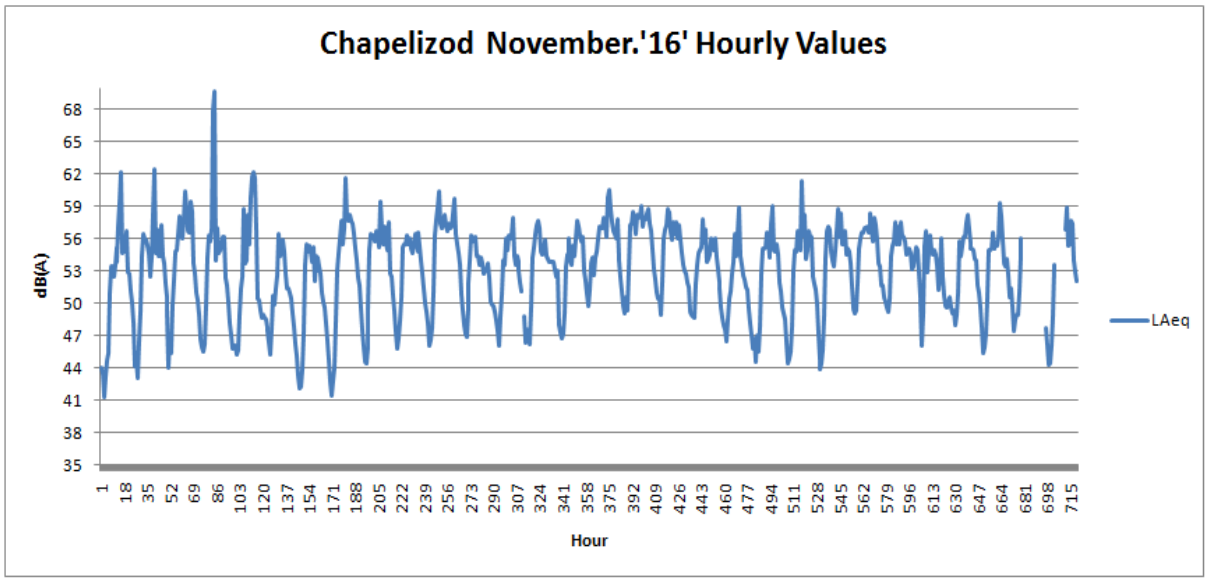

Chapelizod June.'16' Hourly Values
dB(A)
Hour
LAeq

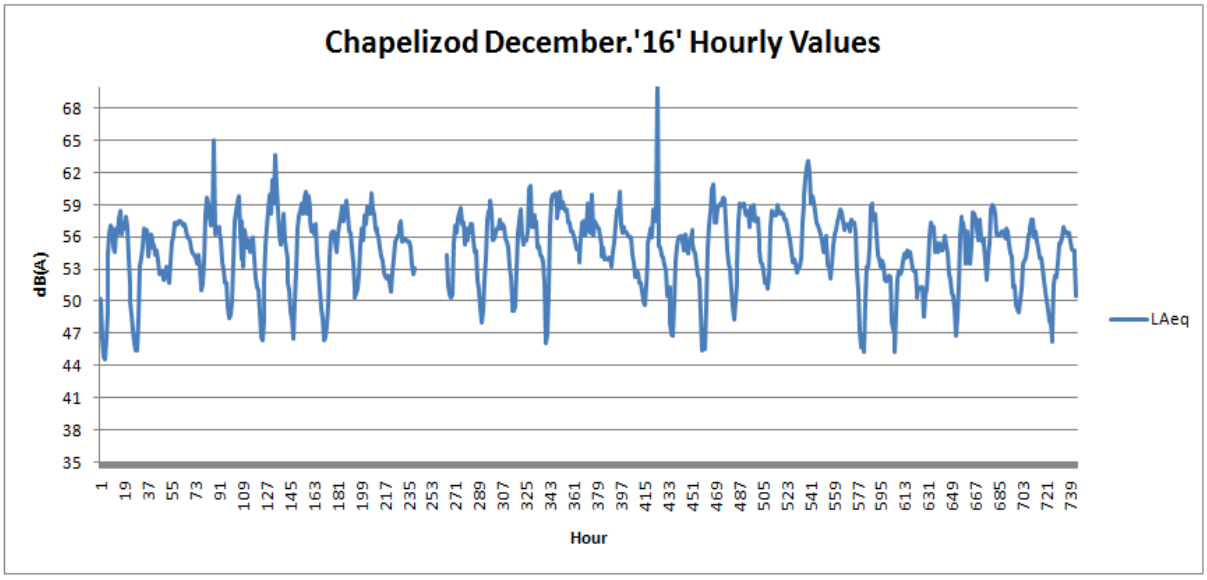

Chapelizod July.'16' Hourly Values
dB(A)
Hour
LAeq


Chapelizod August.'16' Hourly Values
dB(A)
Hour
LAeq


Chapelizod September.'16' Hourly Values
dB(A)
Hour
LAeq


Chapelizod October.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

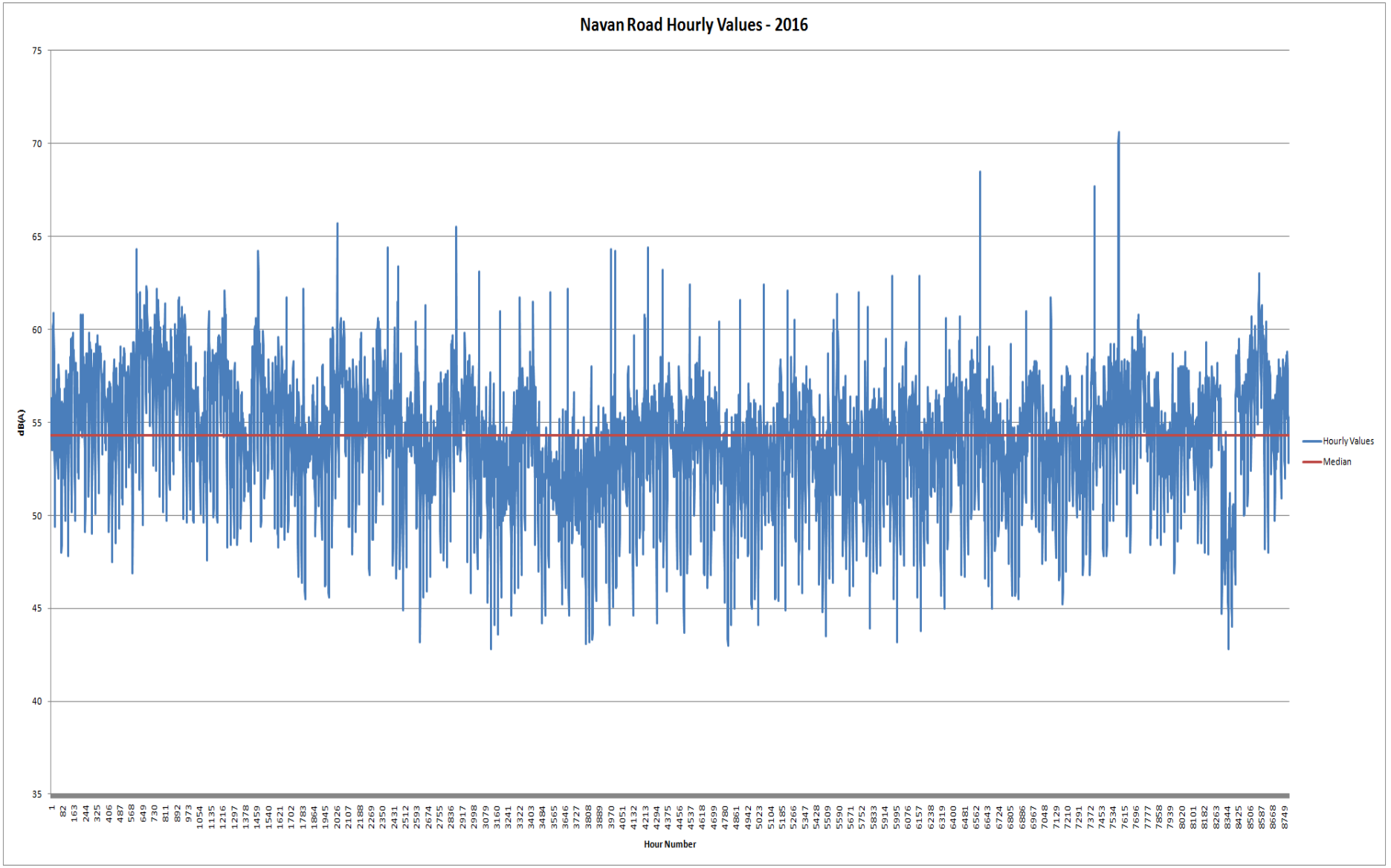

Chapelizod November.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681 698 715
Hour
LAeq

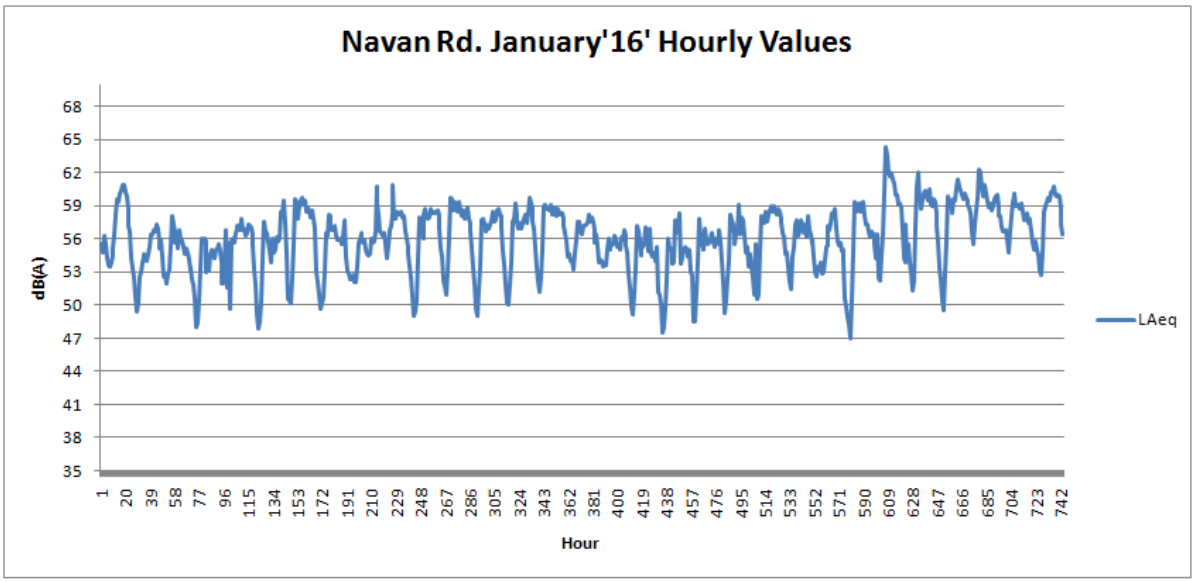

Chapelizod December.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

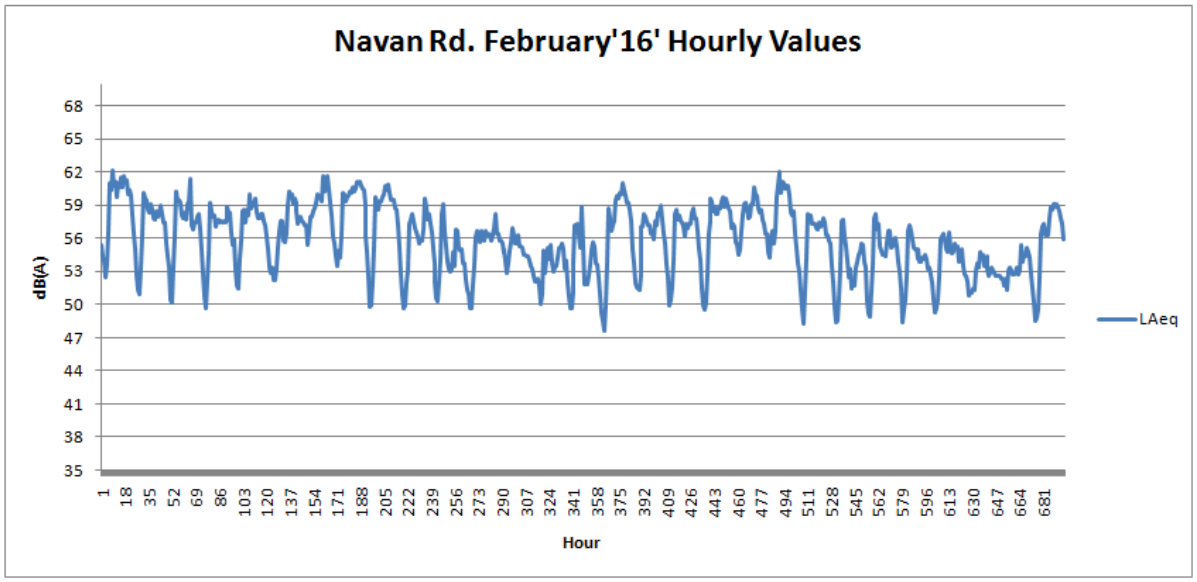
ASHTOWN GROVE

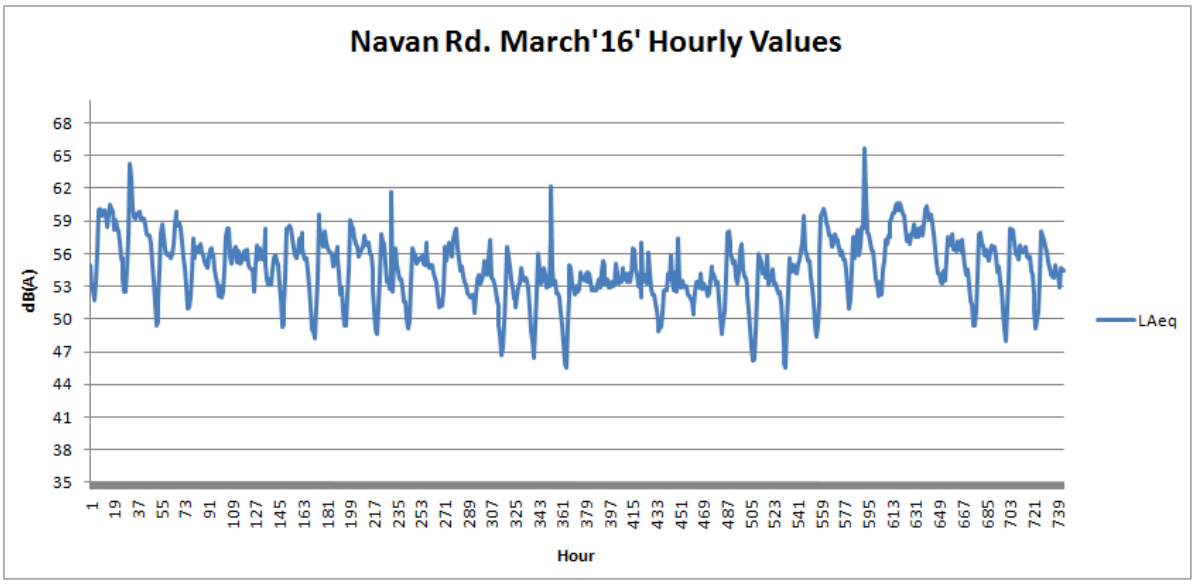
NAVAN ROAD

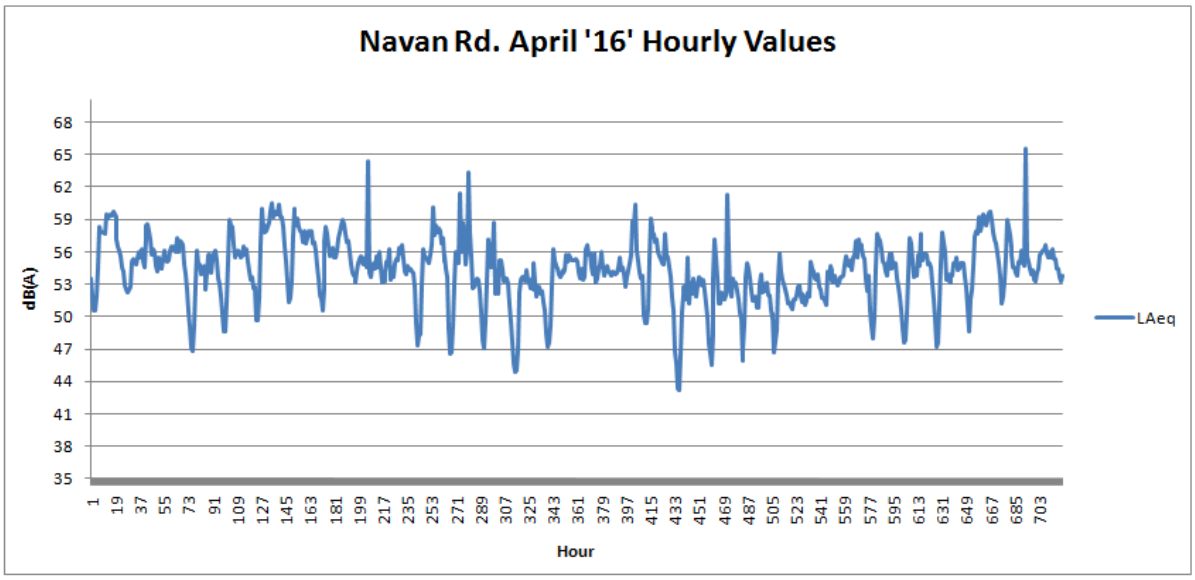
DUBLIN 7

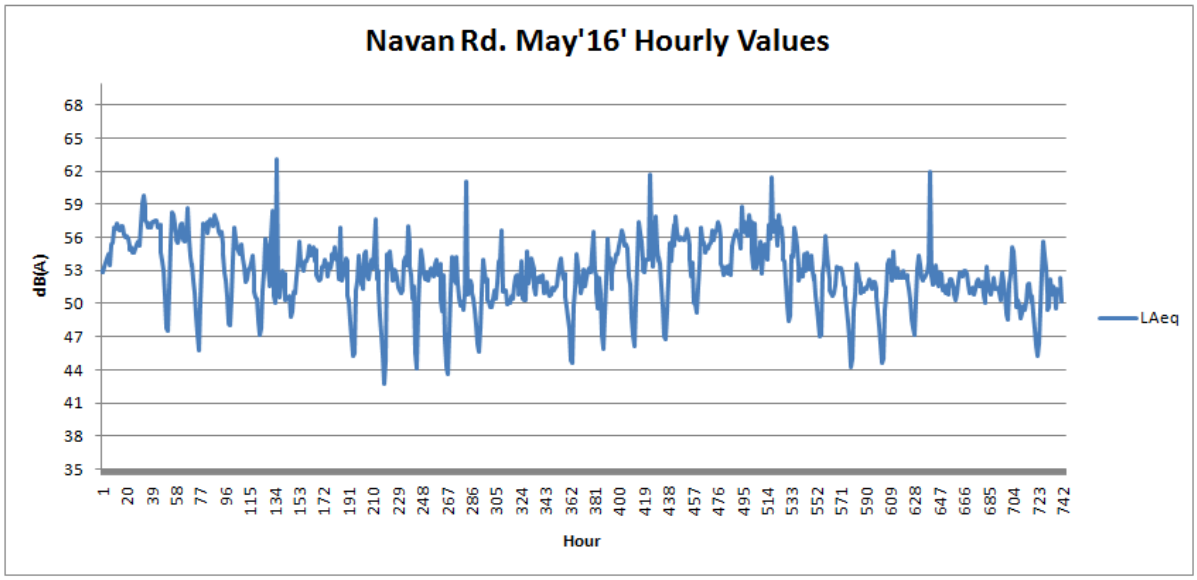

Navan Road Hourly Values - 2016
dB(A)
75
70
65
60
55
50
45
40
35
Hour Number
1
82
163
244
325
406
487
568
649
730
811
892
973
1054
1135
1216
1297
1378
1459
1540
1621
1702
1783
1864
1945
2026
2107
2188
2269
2350
2431
2512
2593
2674
2755
2836
2917
2998
3079
3160
3241
3322
3403
3484
3565
3646
3727
3808
3889
3970
4051
4132
4213
4294
4375
4456
4537
4618
4699
4780
4861
4942
5023
5104
5185
5266
5347
5428
5509
5590
5671
5752
5833
5914
5995
6076
6157
6238
6319
6400
6481
6562
6643
6724
6805
6886
6967
7048
7129
7210
7291
7372
7453
7534
7615
7696
7777
7858
7939
8020
8101
8182
8263
8344
8425
8506
8587
8668
8749
Hourly Values
Median

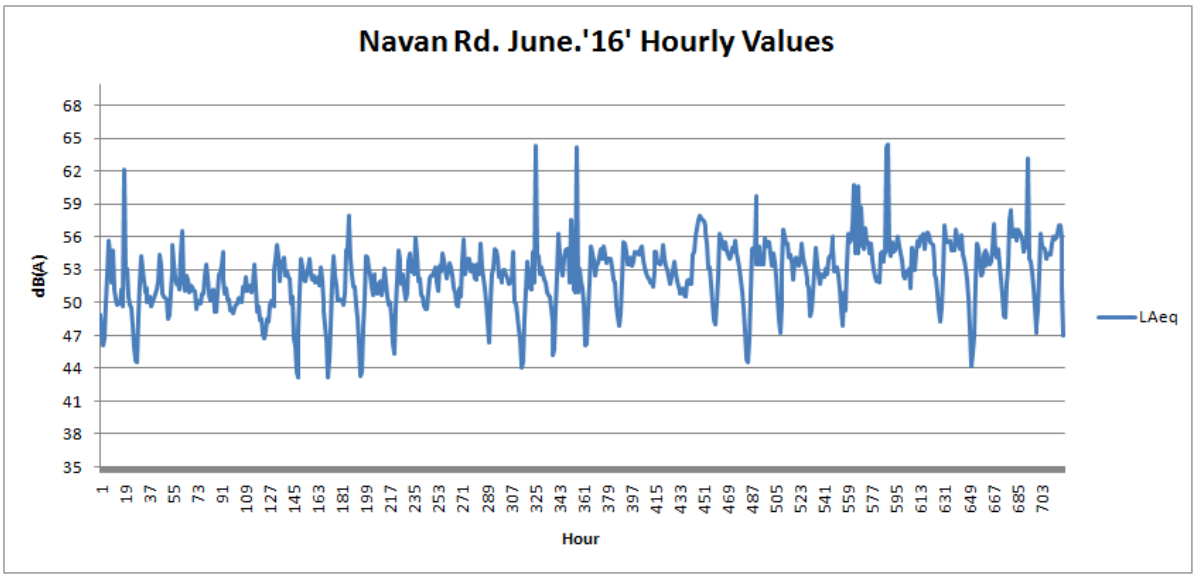

Navan Rd. January'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

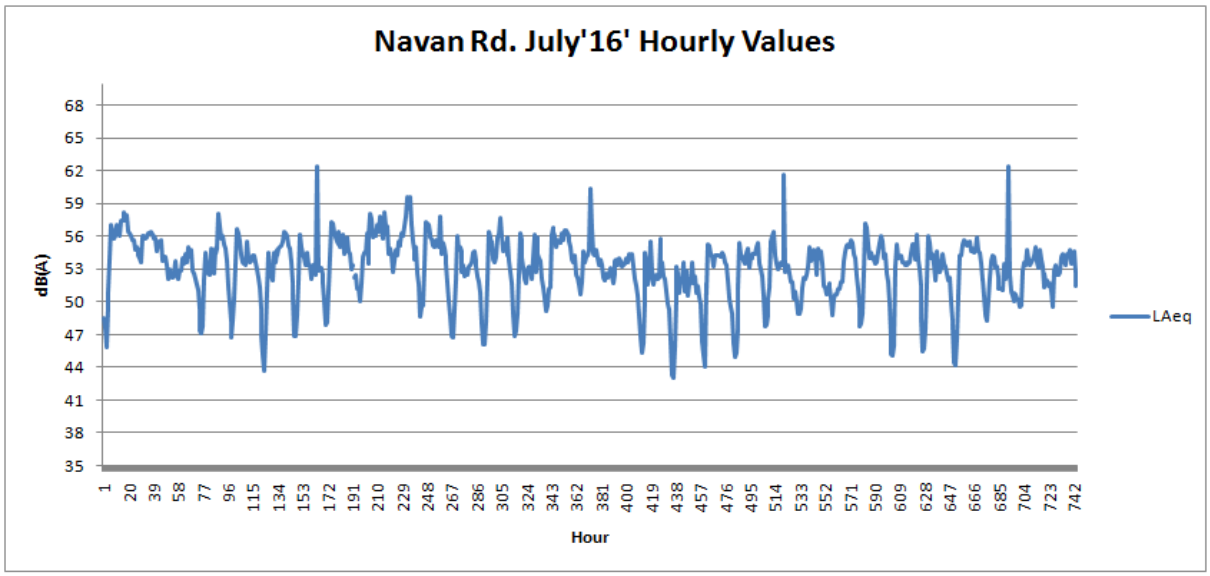

Navan Rd. February'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681
Hour
LAeq

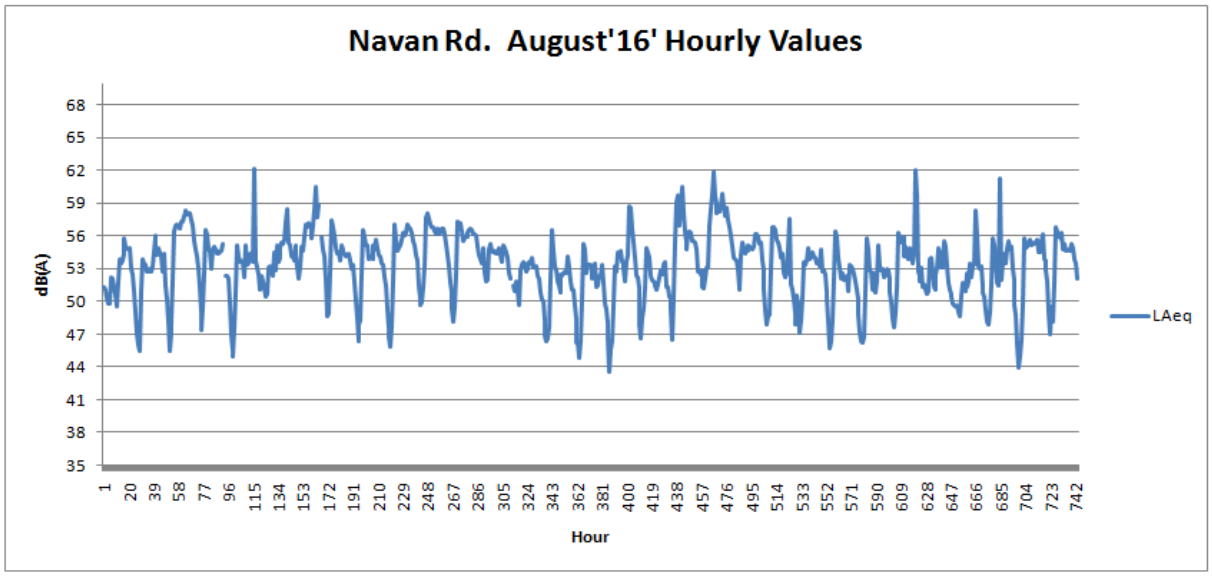

Navan Rd. March'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

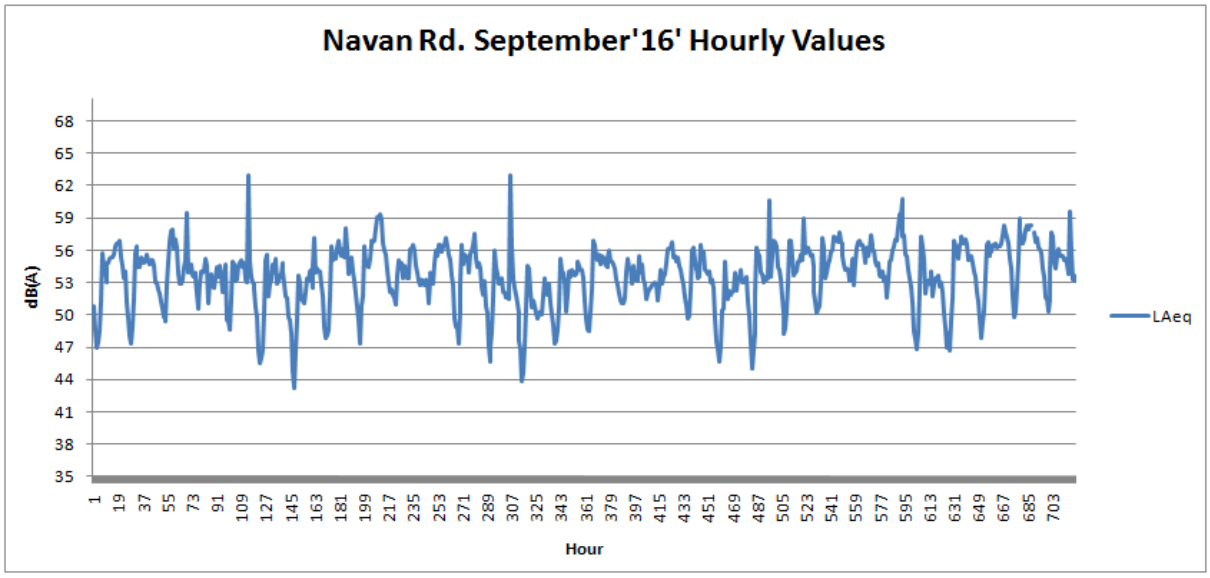

Navan Rd. April '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

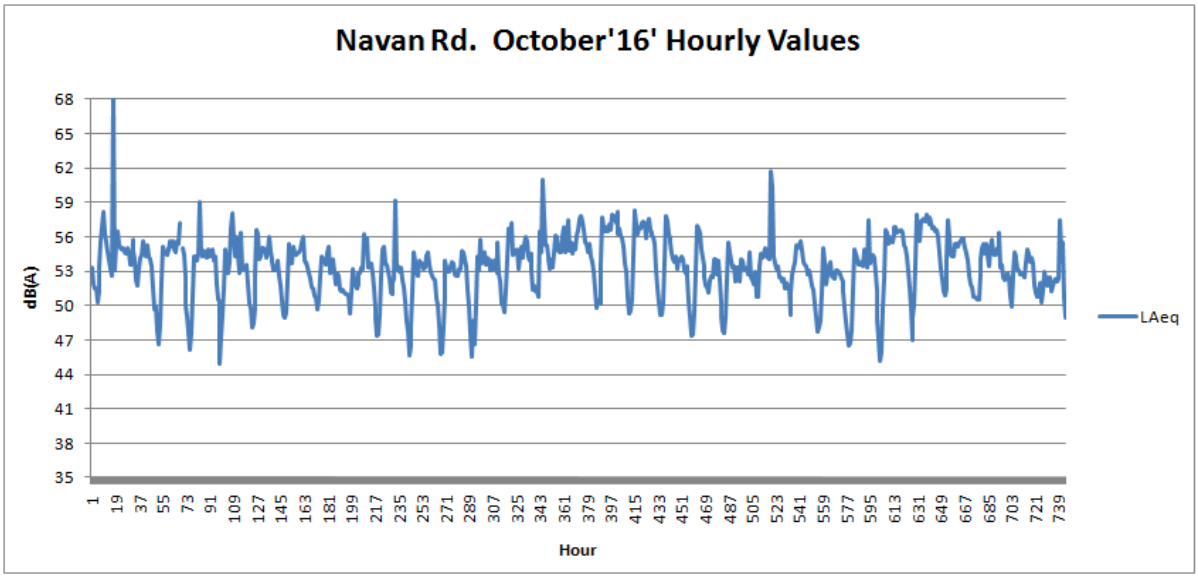

Navan Rd. May'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

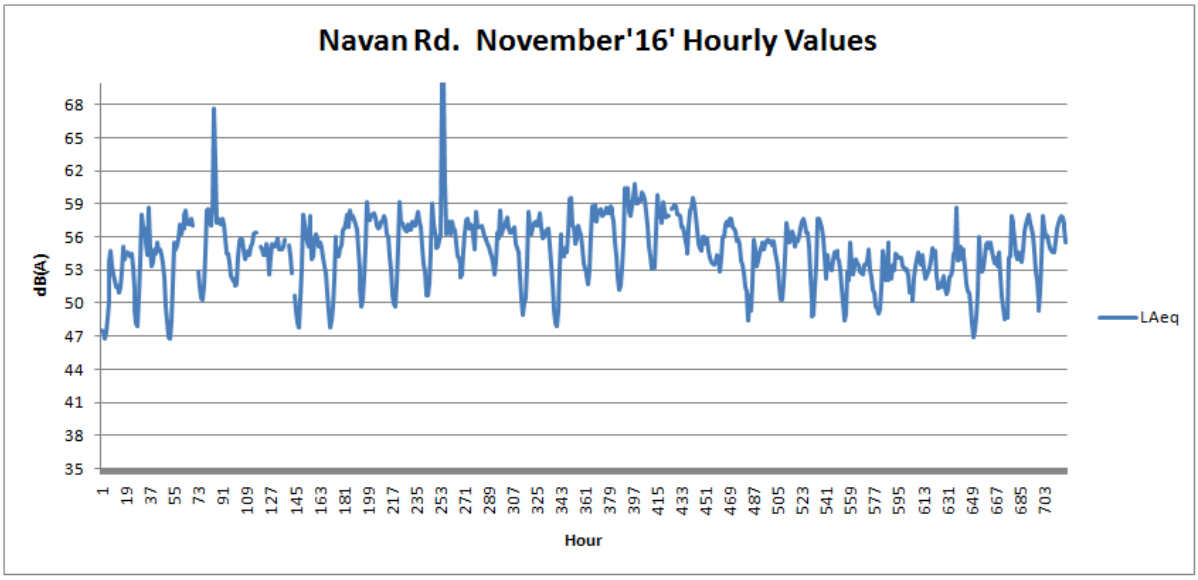

Navan Rd. June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

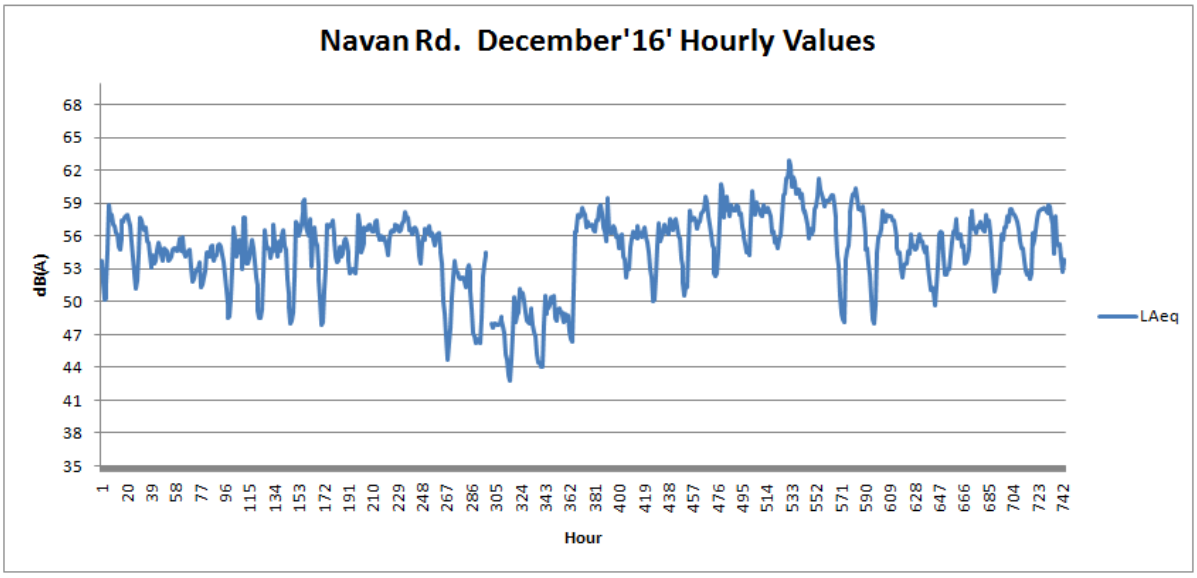

Navan Rd. July'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq


Navan Rd. August'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq


Navan Rd. September'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq


Navan Rd. October'16' Hourly Values
dB(A)
Hour
LAeq

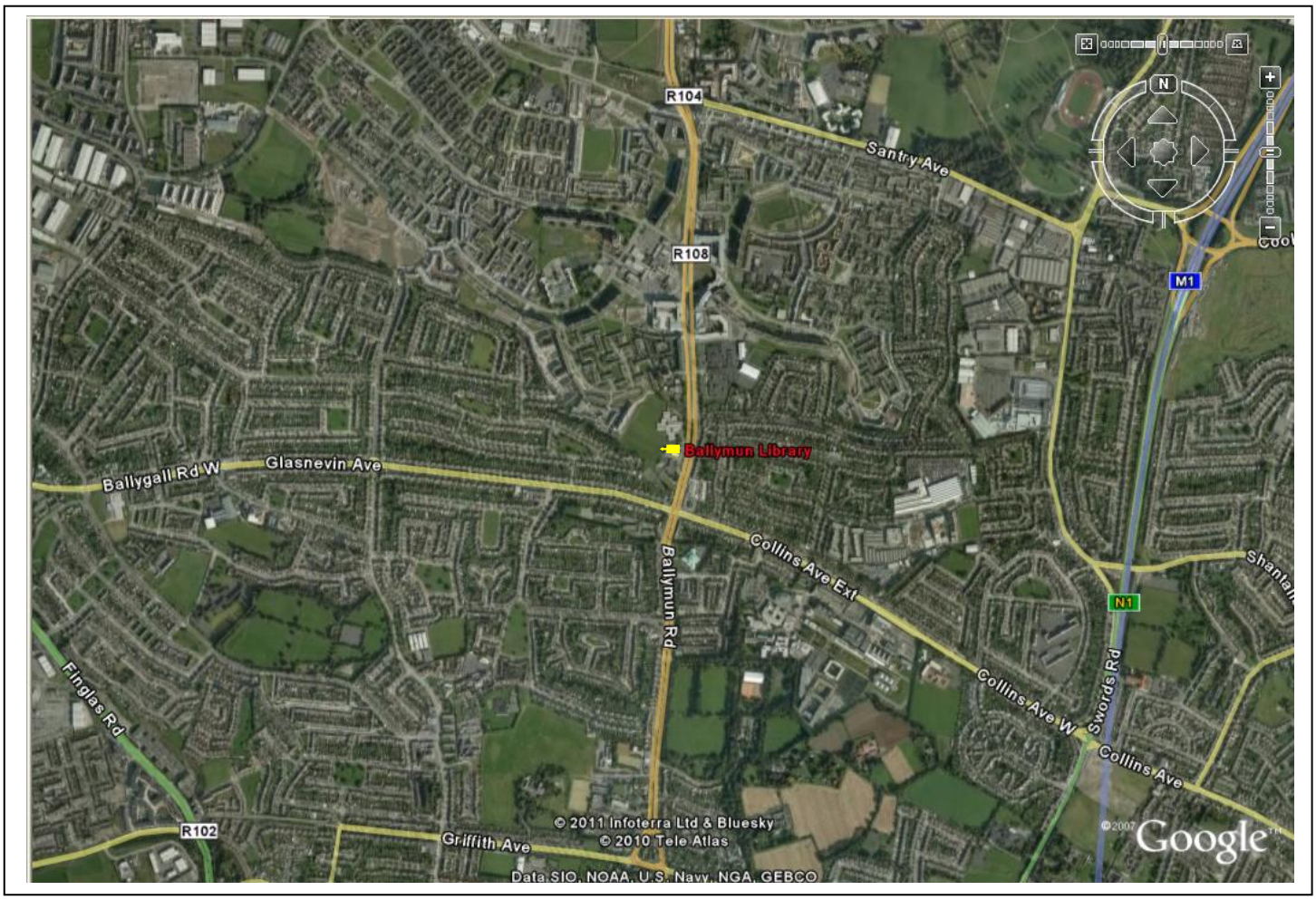

Navan Rd. November'16' Hourly Values
dB(A)
Hour
LAeq

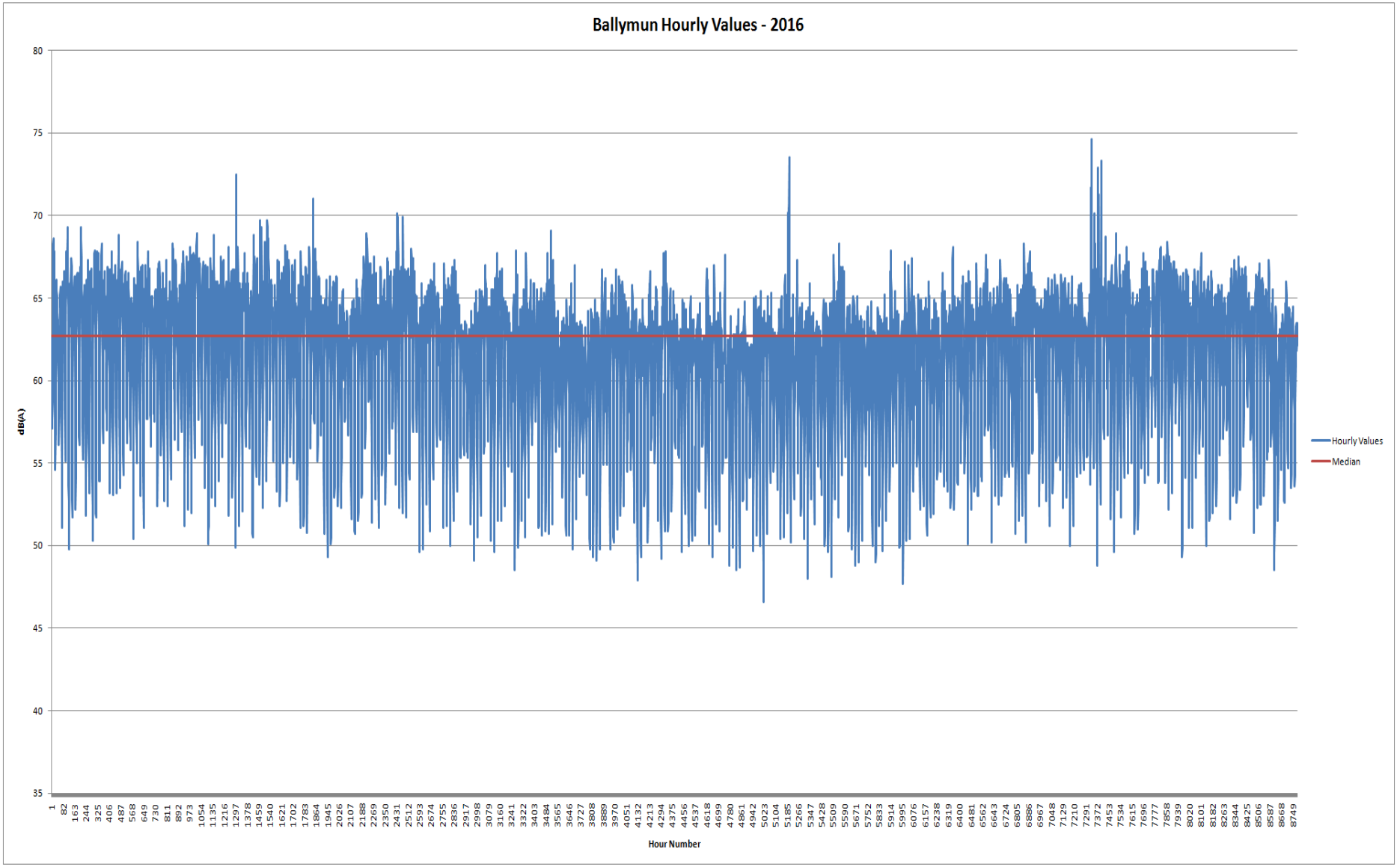

Navan Rd. December'16' Hourly Values
dB(A)
Hour
LAeq

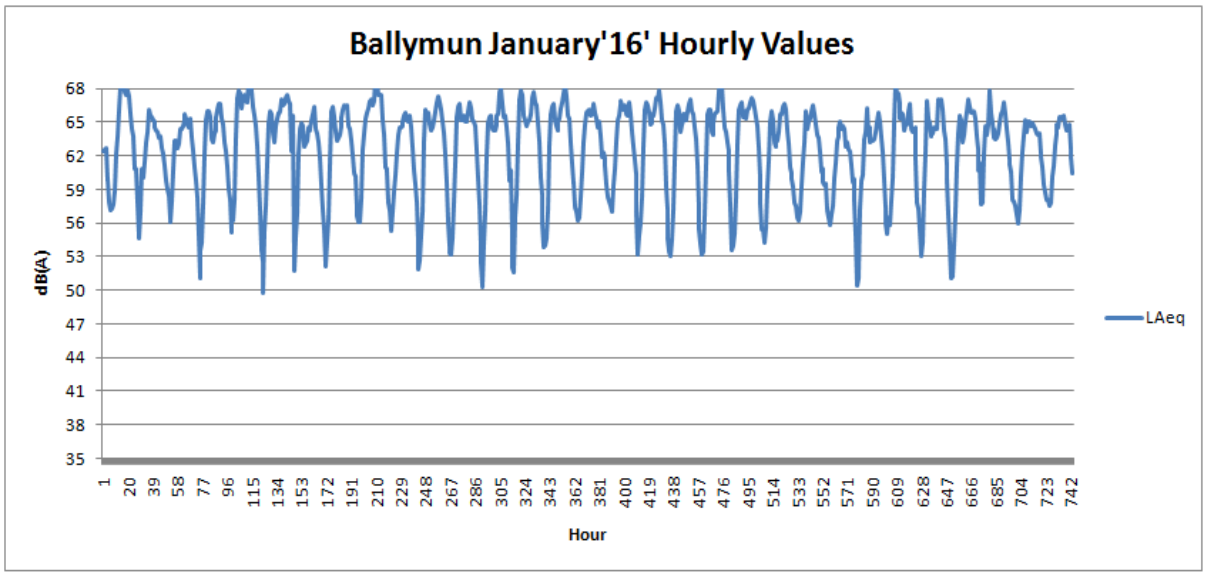
BALLYMUN LIBRARY

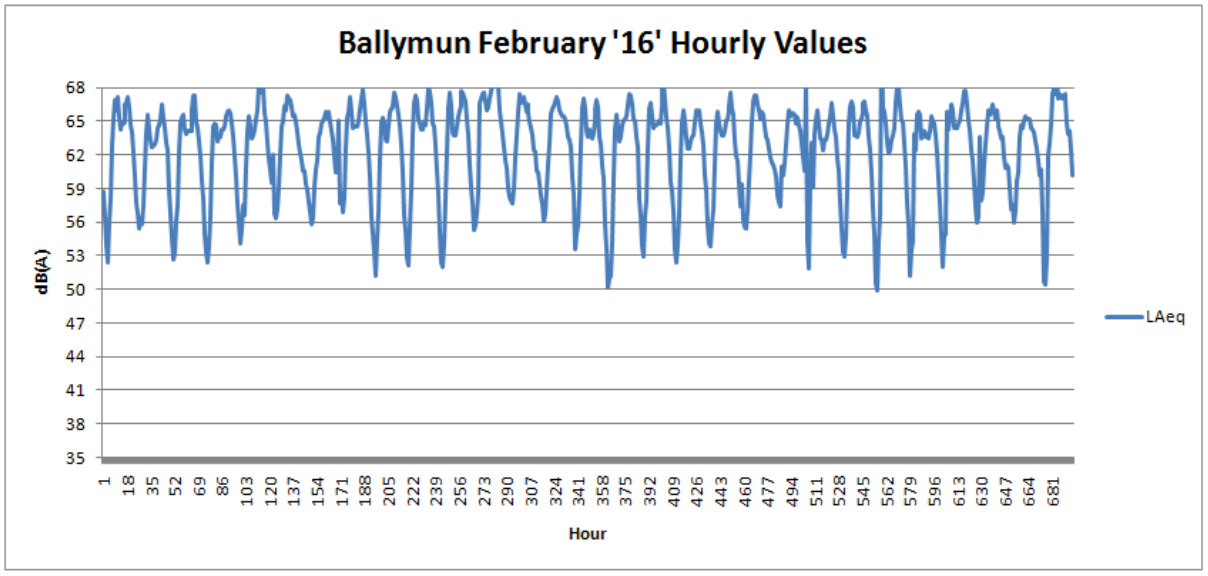
BALLYMUN ROAD

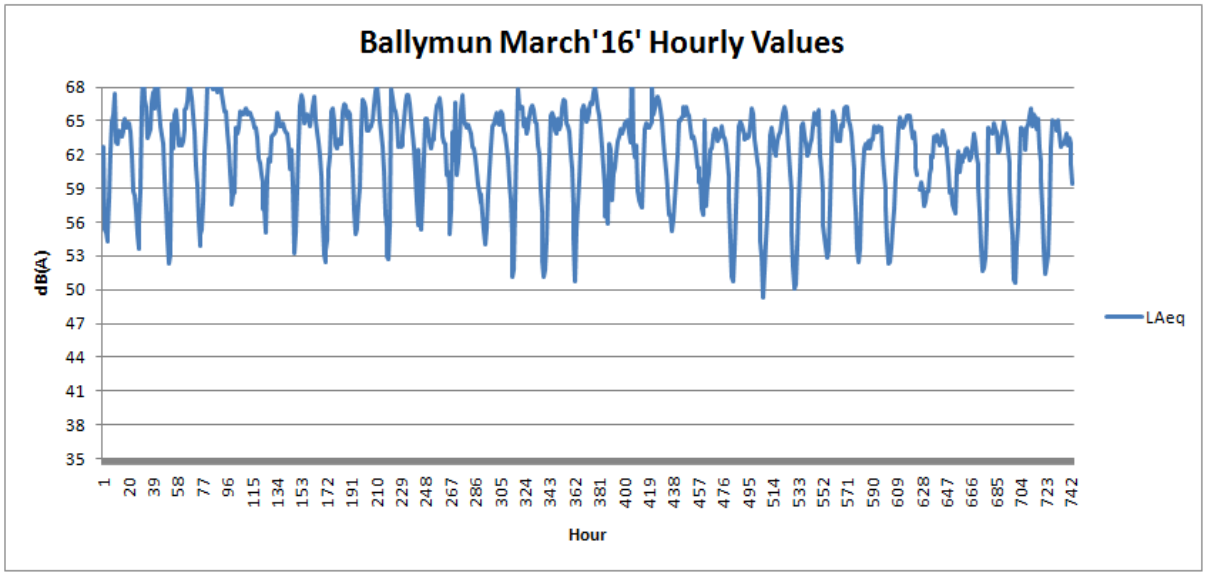
DUBLIN 11

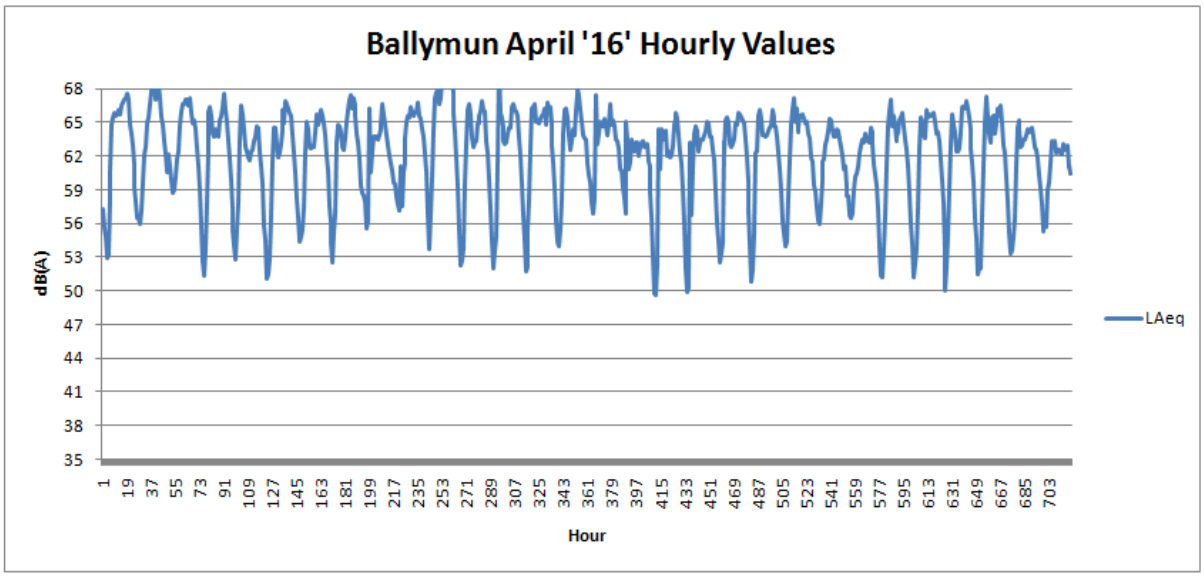


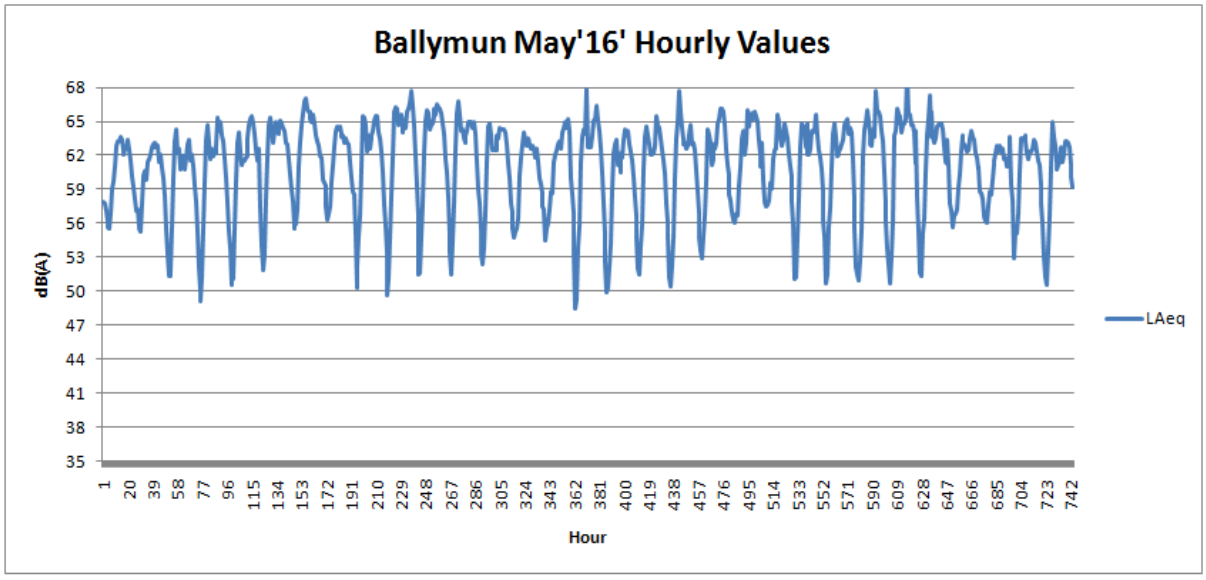

Ballymun Hourly Values - 2016
dB(A)
80
75
70
65
60
55
50
45
40
35
Hour Number
Hourly Values
Median

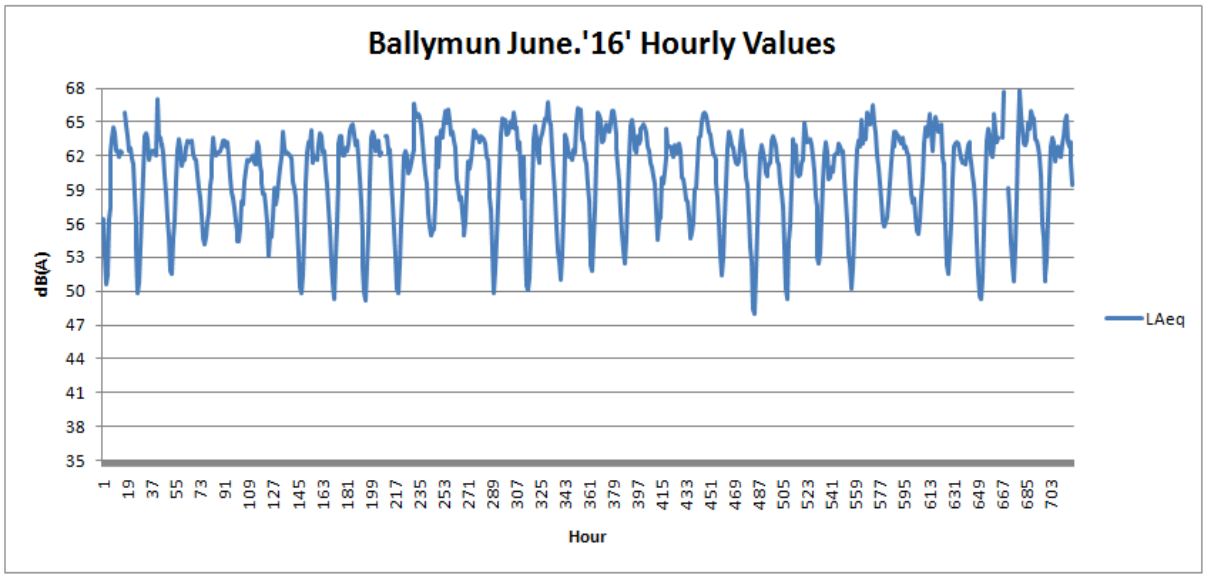

Ballymun January'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

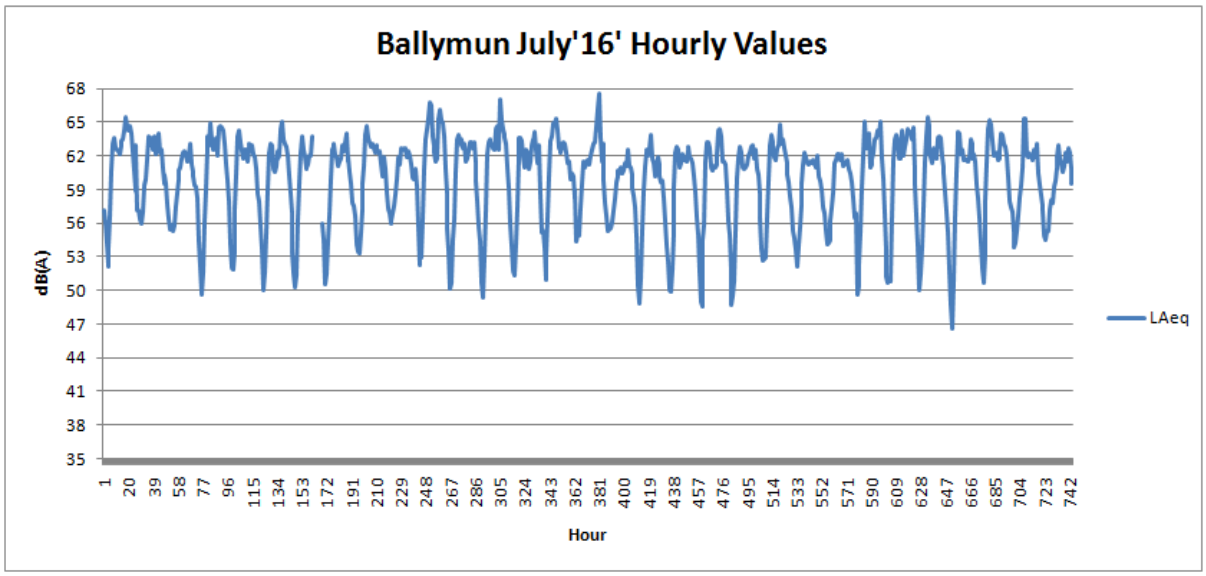

Ballymun February '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681
Hour
LAeq

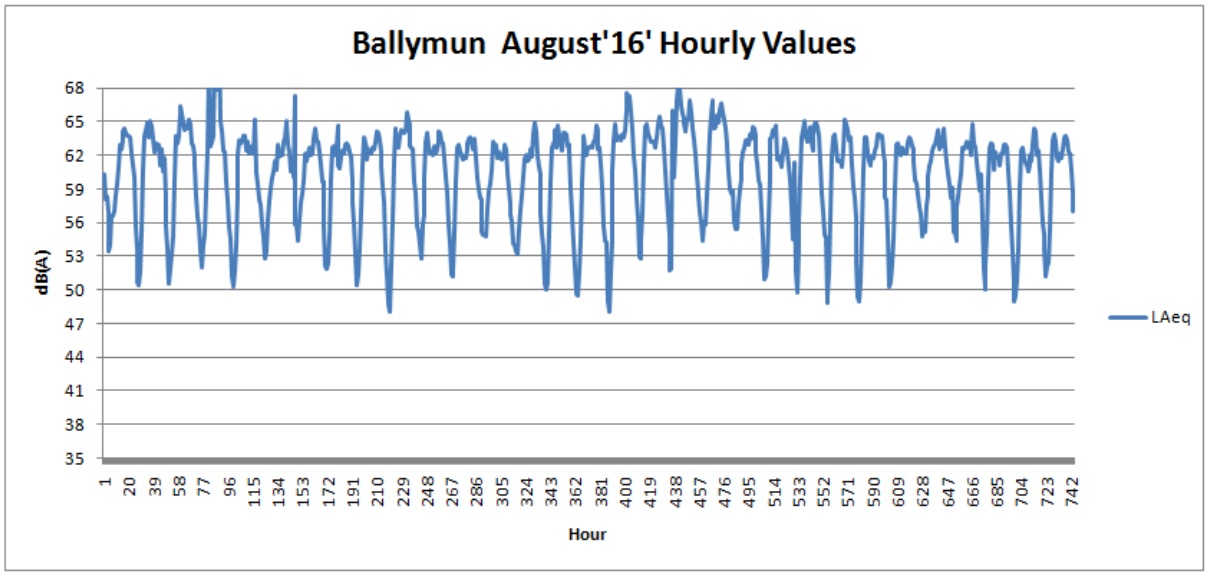

Ballymun March'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

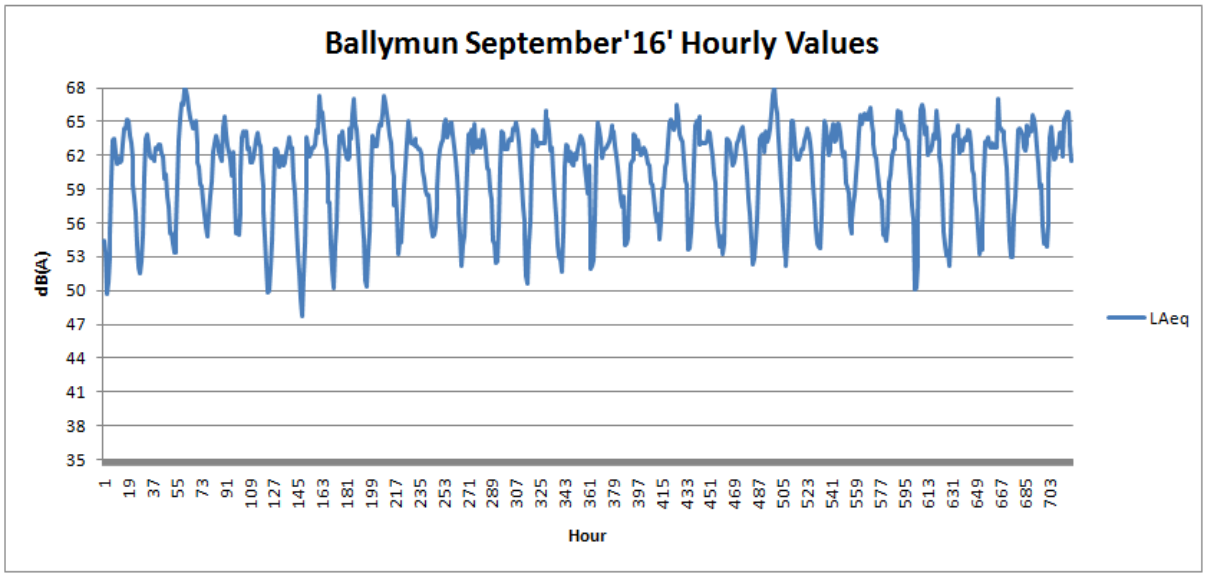

Ballymun April '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

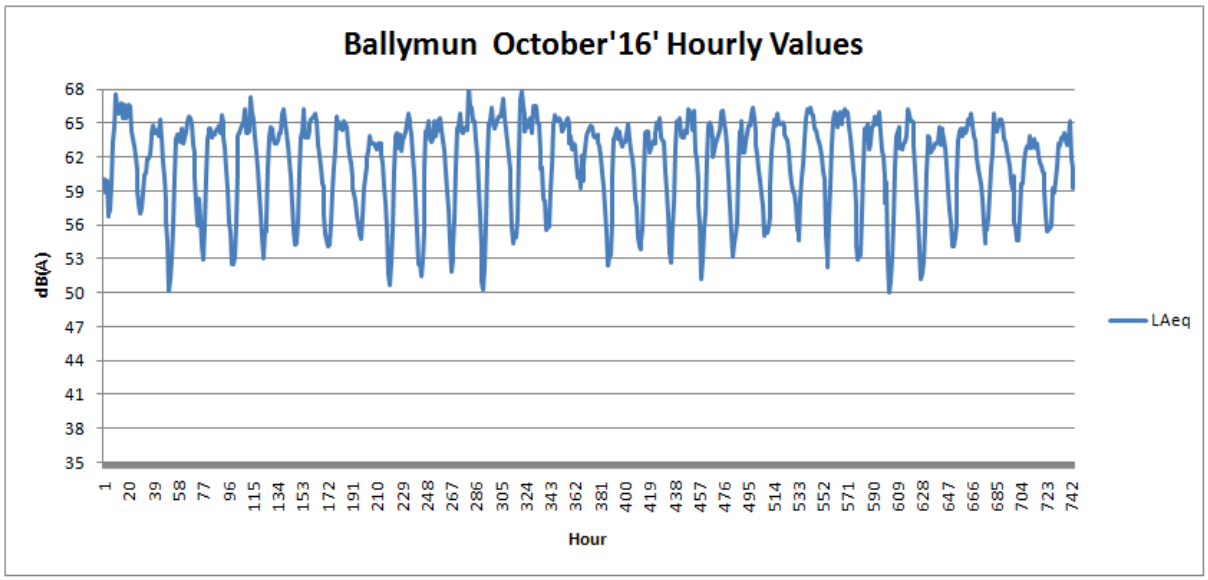

Ballymun May'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

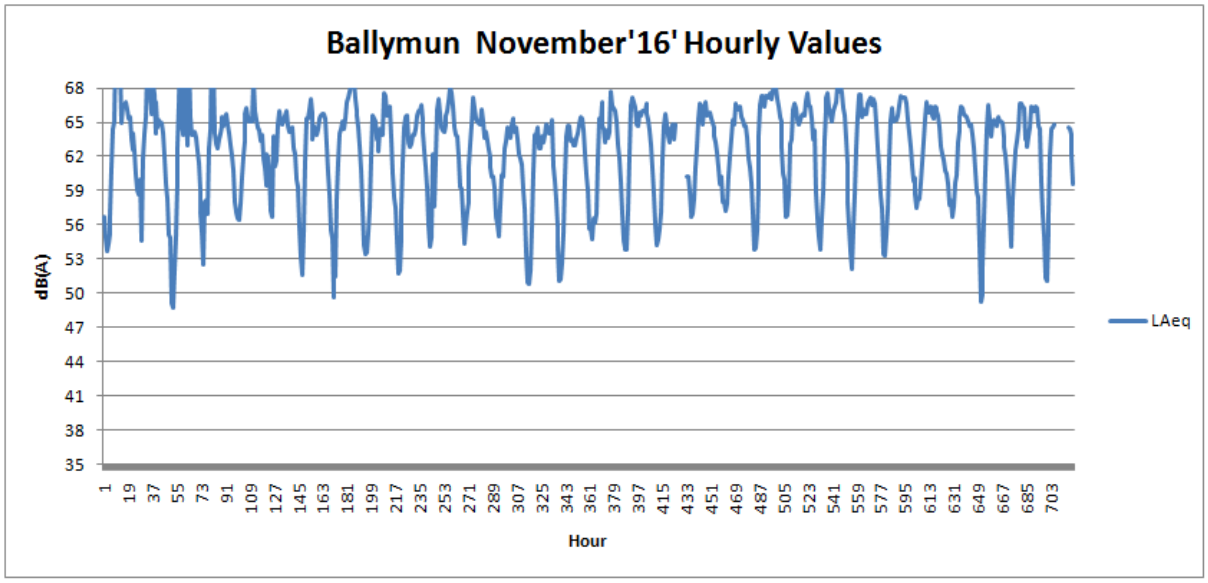

Ballymun June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

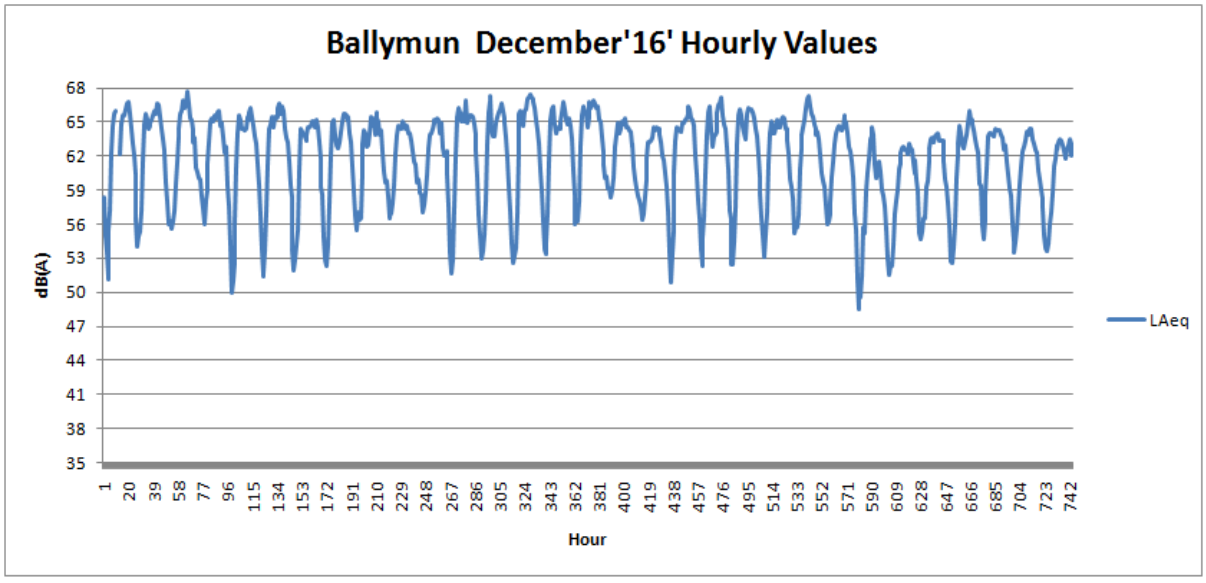

Ballymun July'16' Hourly Values
dB(A)
Hour
LAeq


Ballymun August'16' Hourly Values
dB(A)
Hour
LAeq


Ballymun September'16' Hourly Values
dB(A)
Hour
LAeq


Ballymun October'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

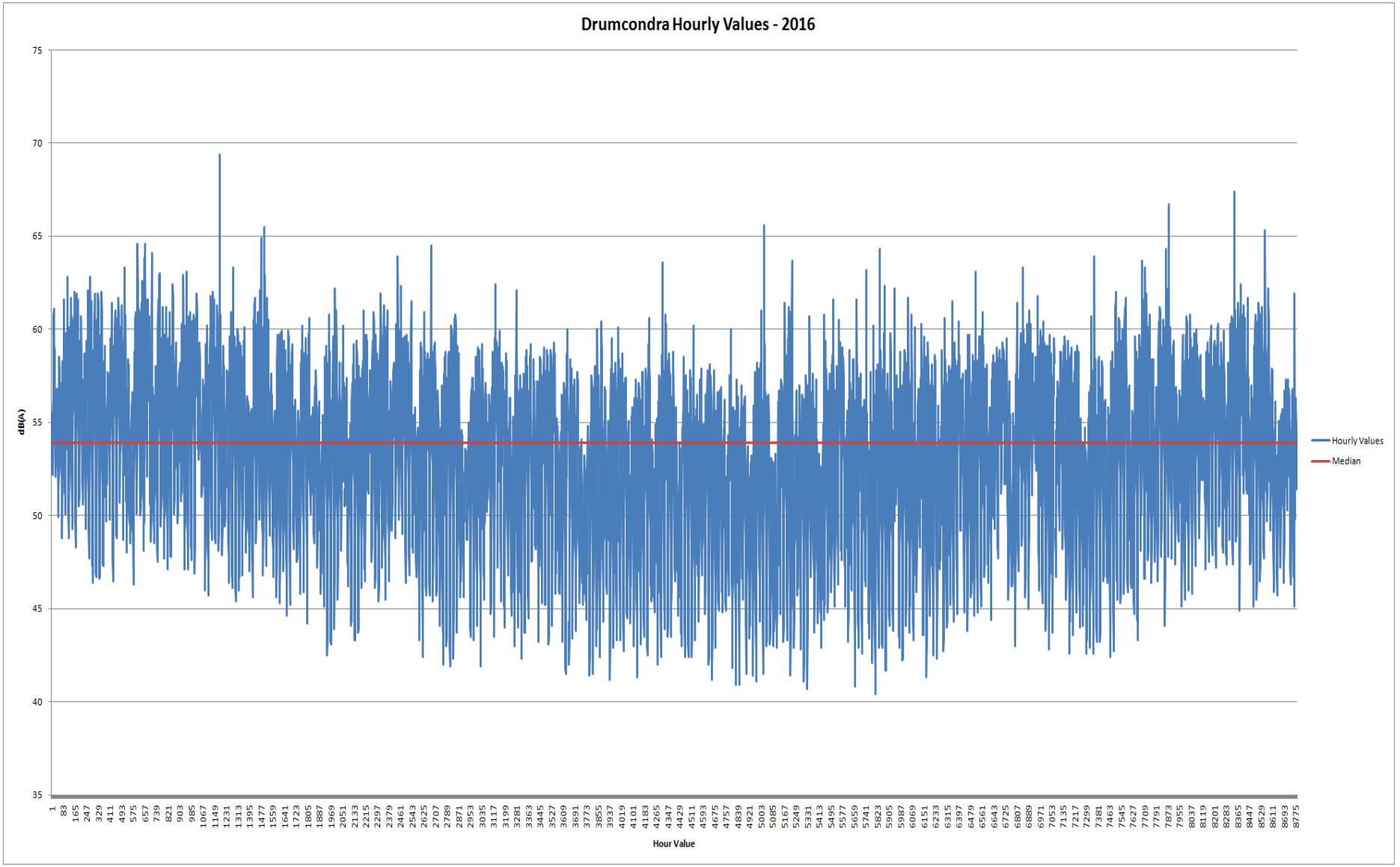

Ballymun November'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

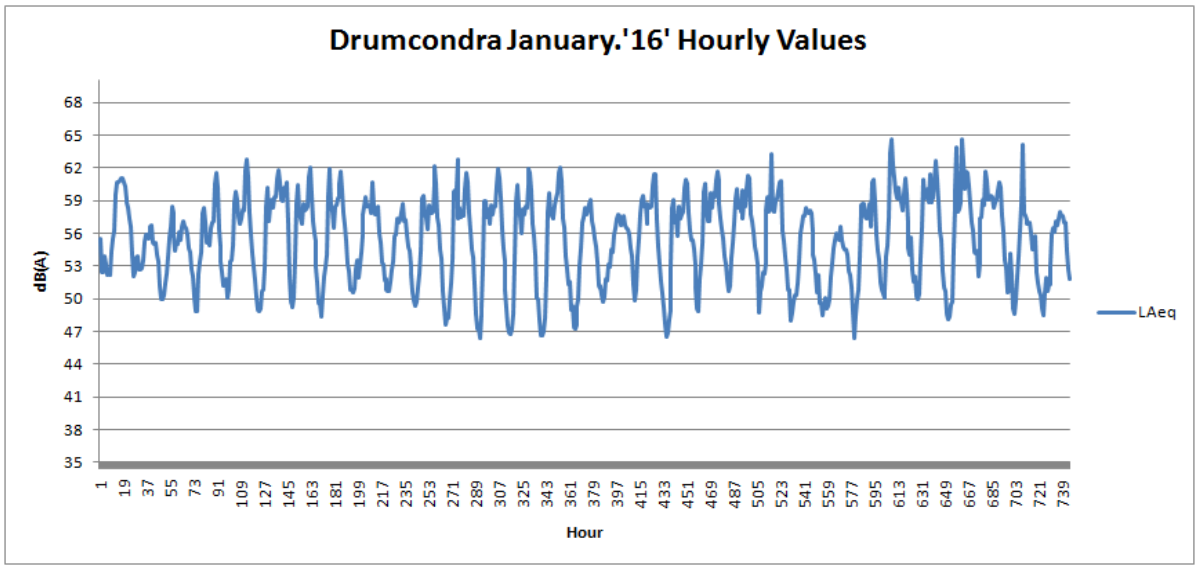

Ballymun December'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

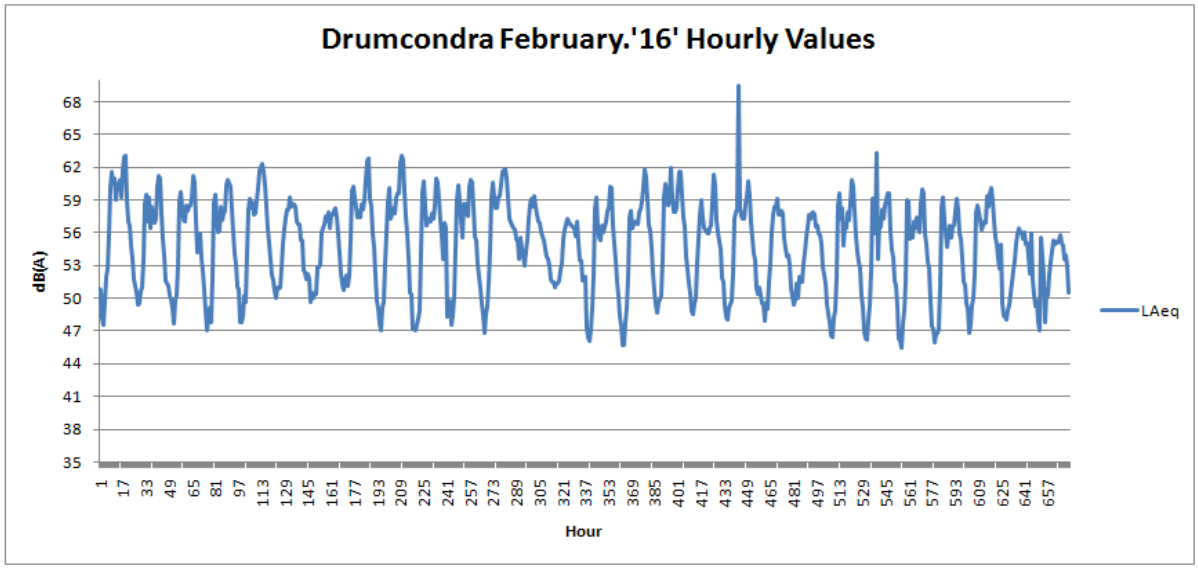
DRUMCONDRA LIBRARY

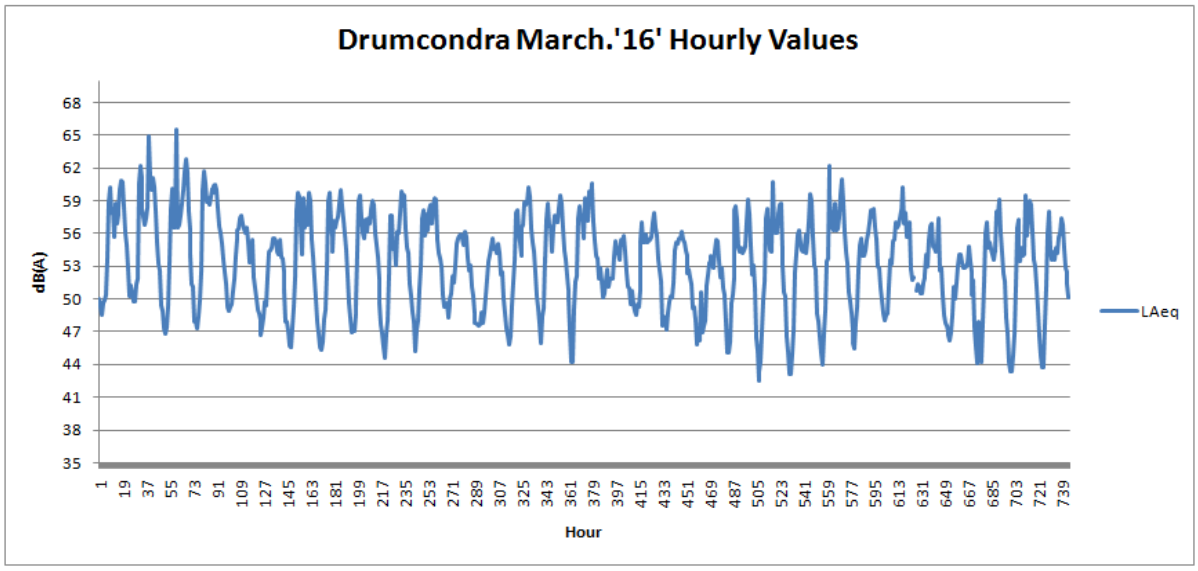
MILLMOUNT AVENUE

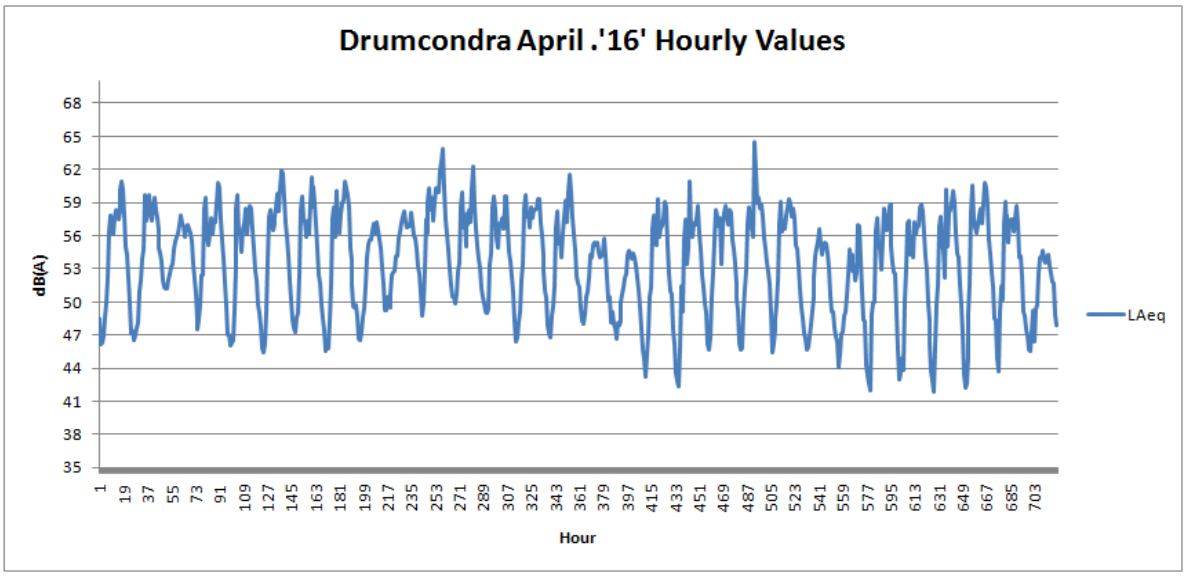
DUBLIN 9

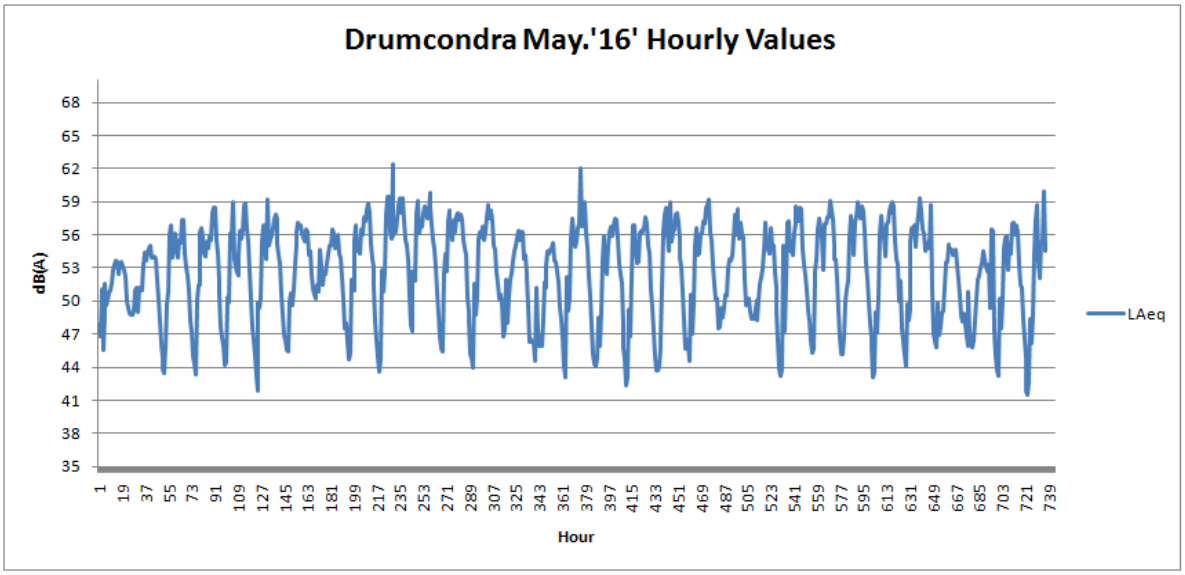

Drumcondra Hourly Values - 2016
dB(A)
75
70
65
60
55
50
45
40
35
Hour Value
1
83
165
247
329
411
493
575
657
739
821
903
985
1067
1149
1231
1313
1395
1477
1559
1641
1723
1805
1887
1969
2051
2133
2215
2297
2379
2461
2543
2625
2707
2789
2871
2953
3035
3117
3199
3281
3363
3445
3527
3609
3691
3773
3855
3937
4019
4101
4183
4265
4347
4429
4511
4593
4675
4757
4839
4921
5003
5085
5167
5249
5331
5413
5495
5577
5659
5741
5823
5905
5987
6069
6151
6233
6315
6397
6479
6561
6643
6725
6807
6889
6971
7053
7135
7217
7299
7381
7463
7545
7627
7709
7791
7873
7955
8037
8119
8201
8283
8365
8447
8529
8611
8693
8775
Hourly Values
Median

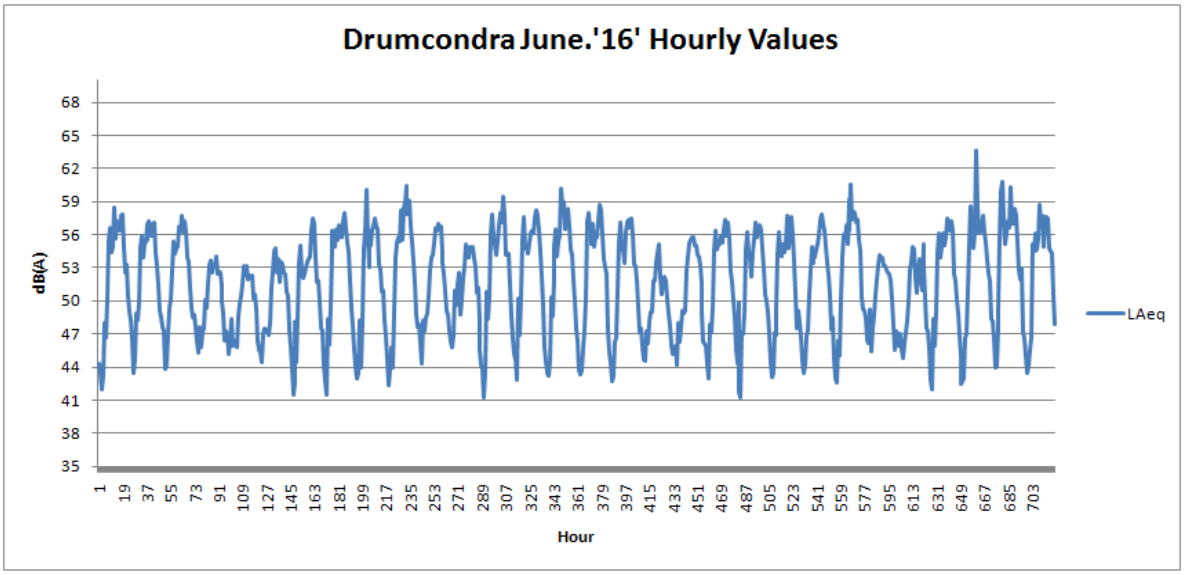

Drumcondra January.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

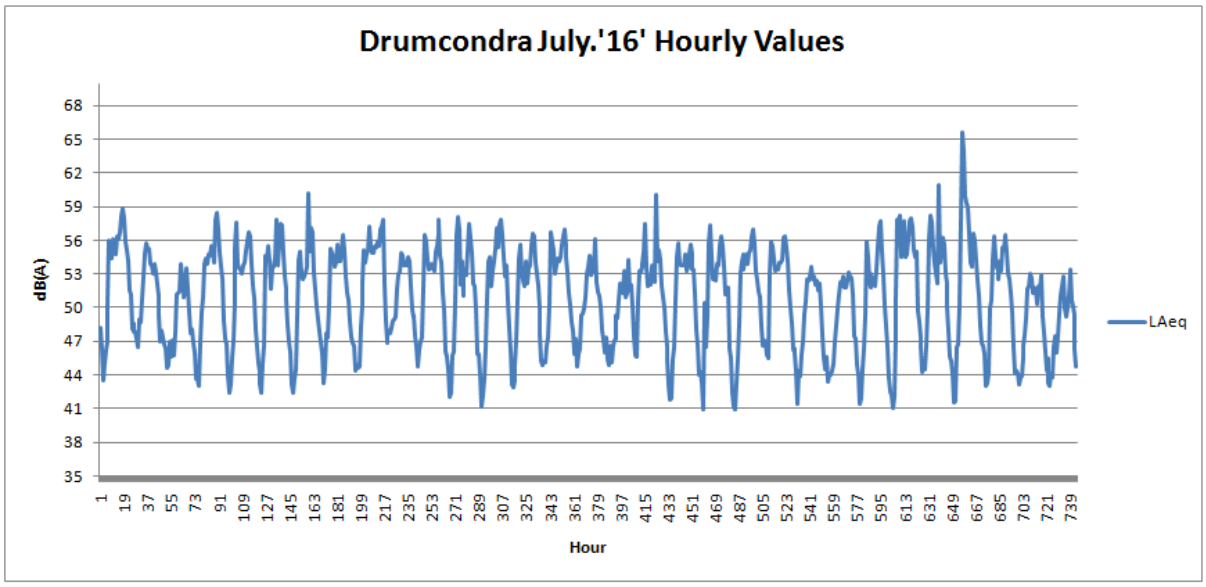

Drumcondra February.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 17 33 49 65 81 97 113 129 145 161 177 193 209 225 241 257 273 289 305 321 337 353 369 385 401 417 433 449 465 481 497 513 529 545 561 577 593 609 625 641 657
Hour
LAeq

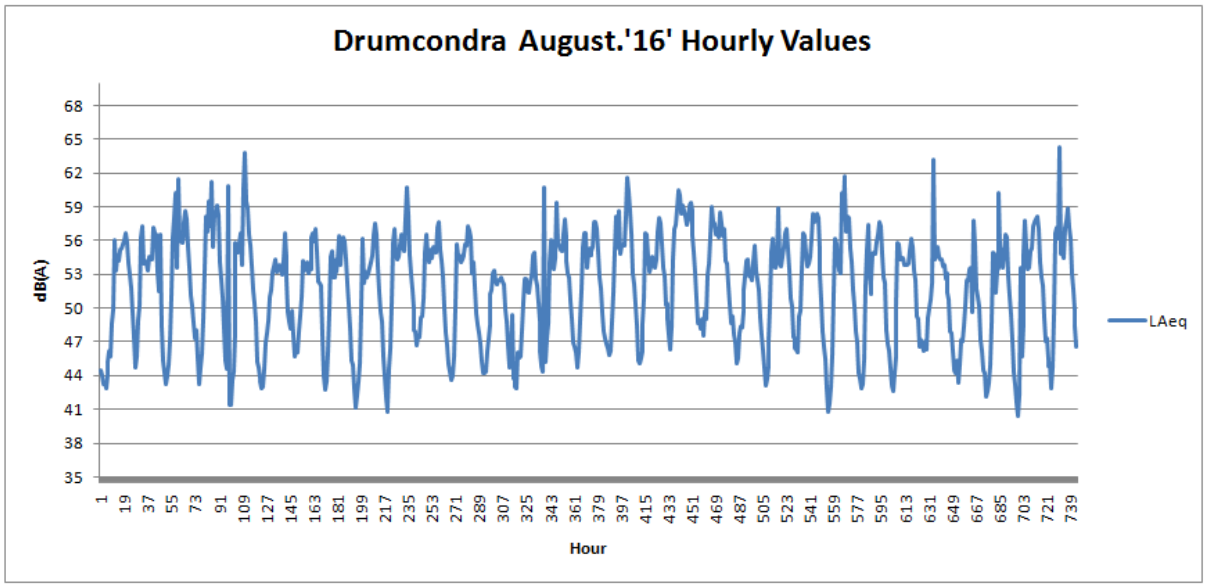

Drumcondra March.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

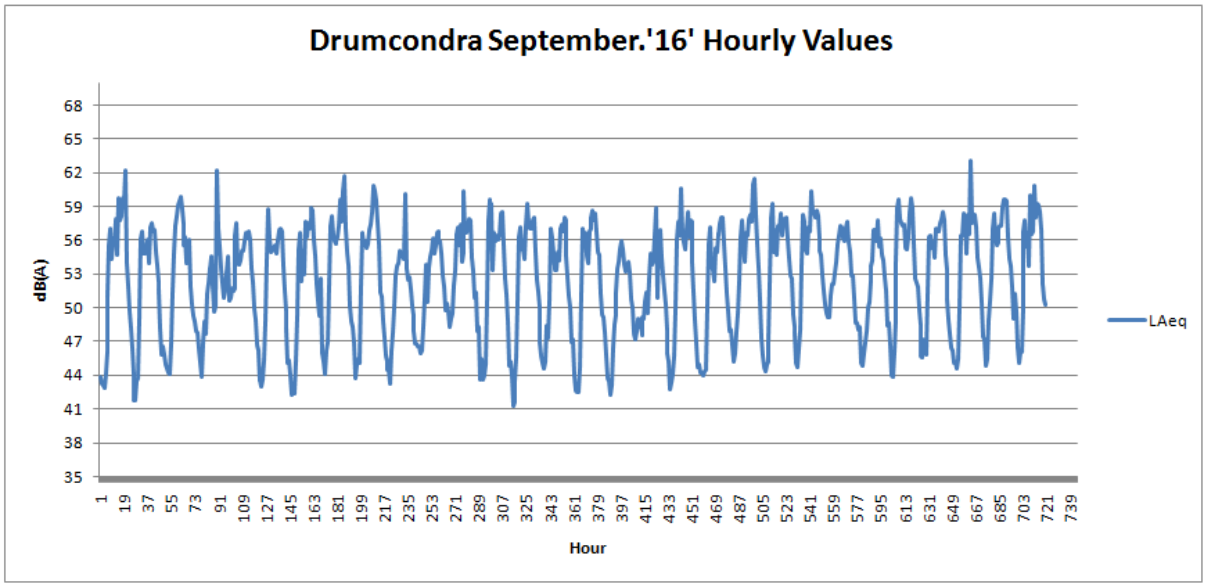

Drumcondra April .'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

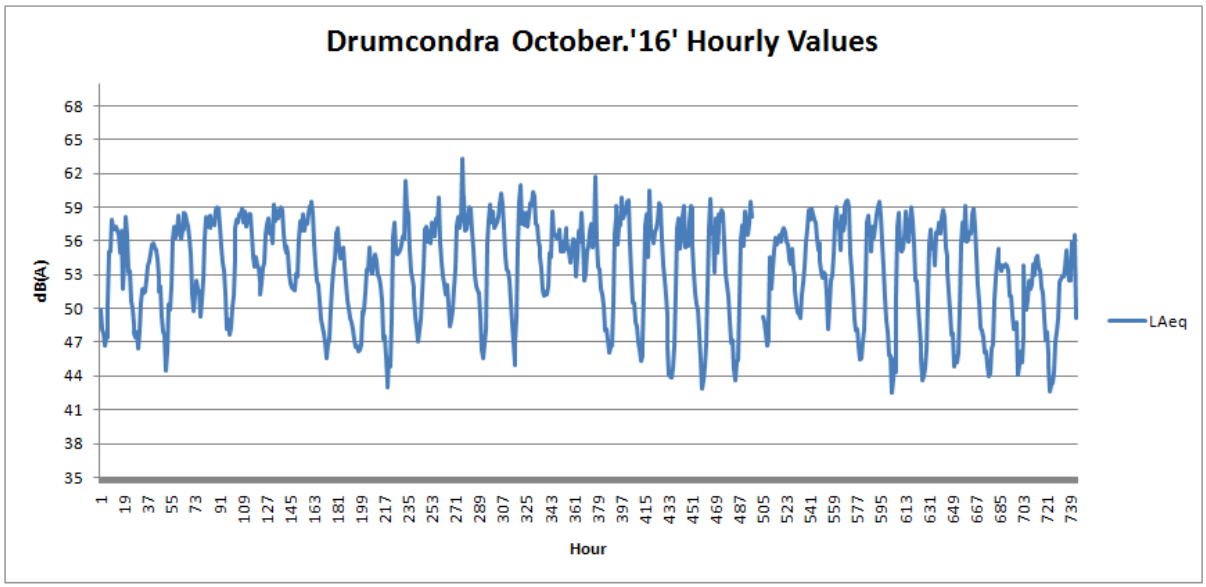

Drumcondra May.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq

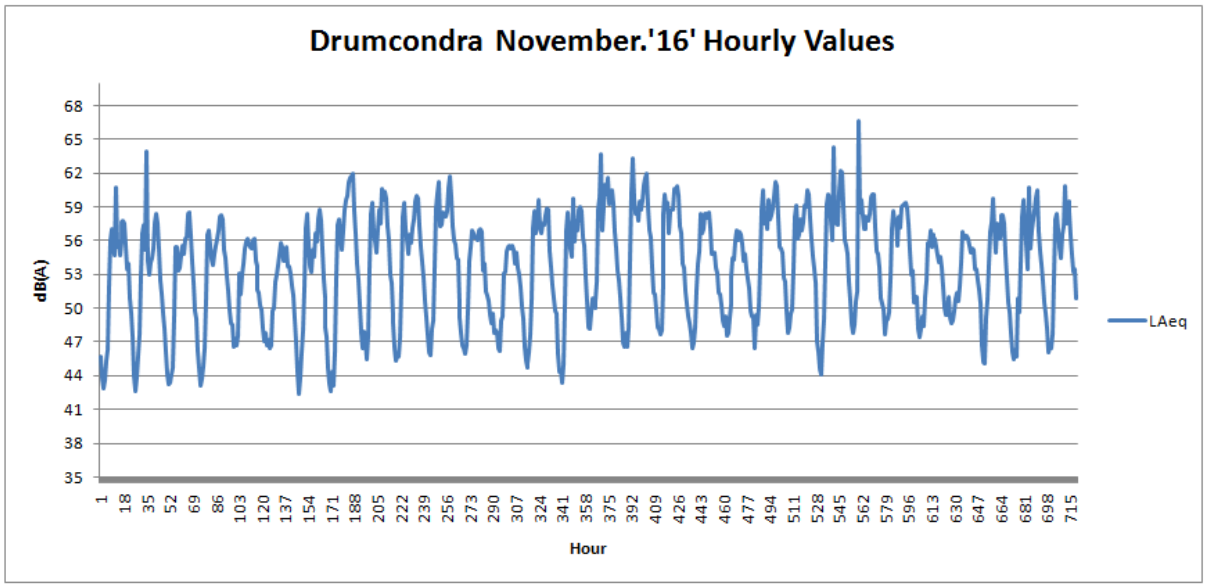

Drumcondra June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

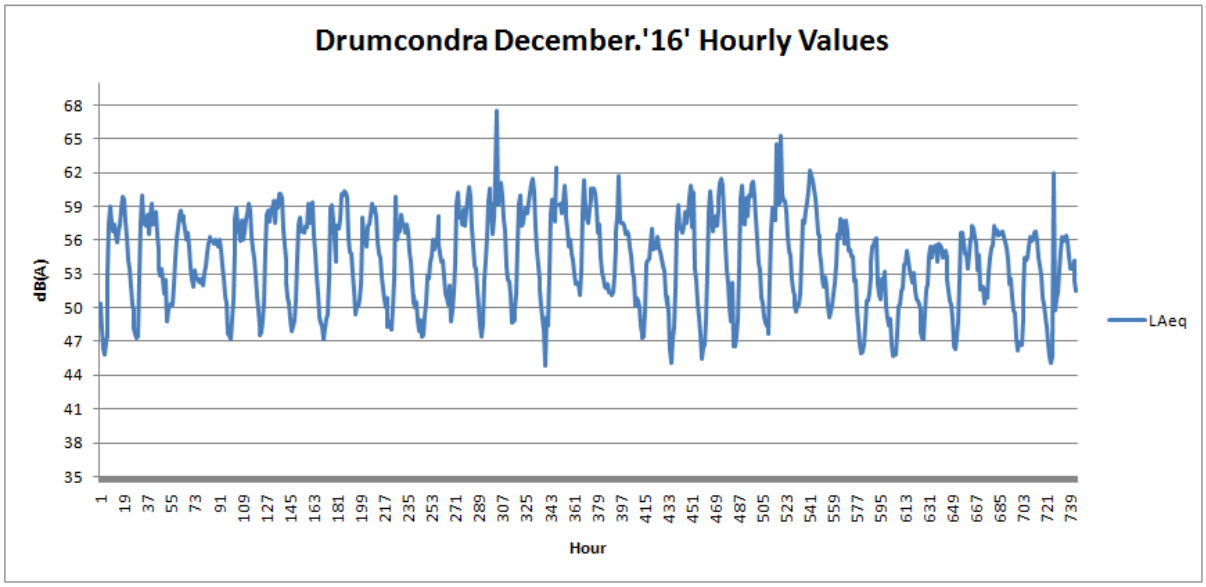

Drumcondra July.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq


Drumcondra August.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq


Drumcondra September.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq


Drumcondra October.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq

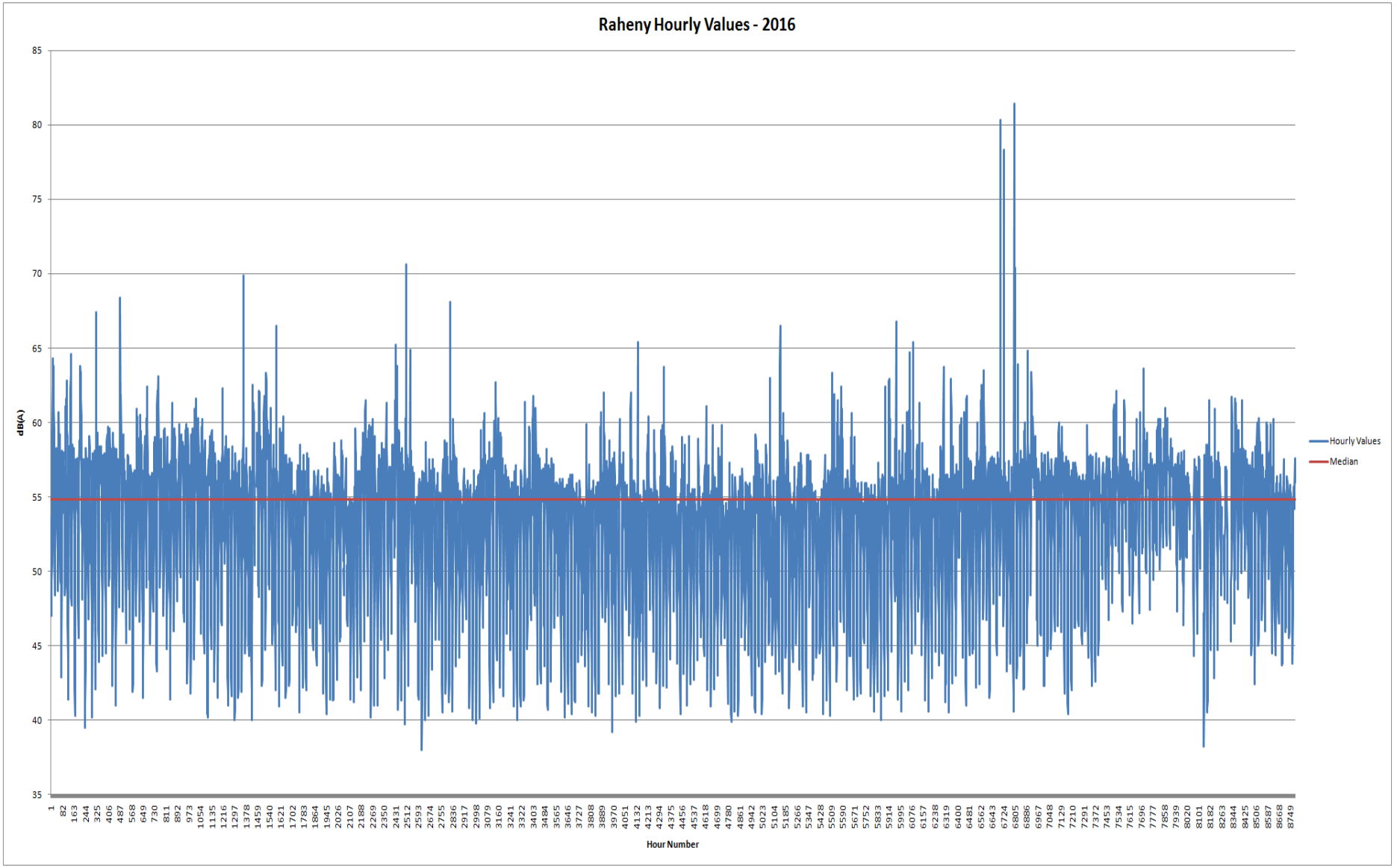

Drumcondra November.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
18
35
52
69
86
103
120
137
154
171
188
205
222
239
256
273
290
307
324
341
358
375
392
409
426
443
460
477
494
511
528
545
562
579
596
613
630
647
664
681
698
715
Hour
LAeq

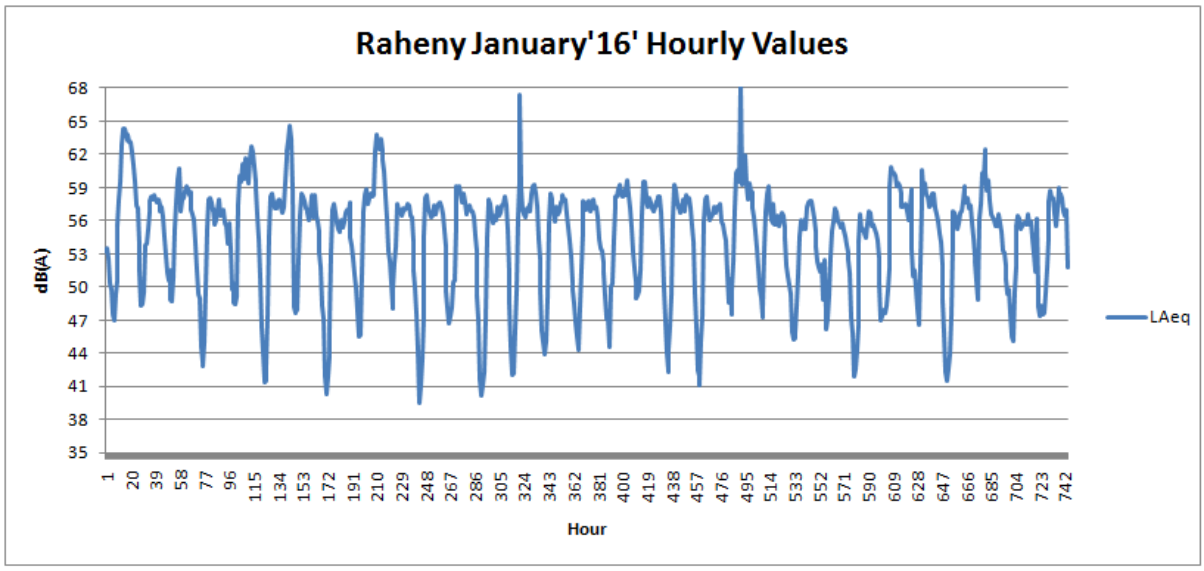

Drumcondra December.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq

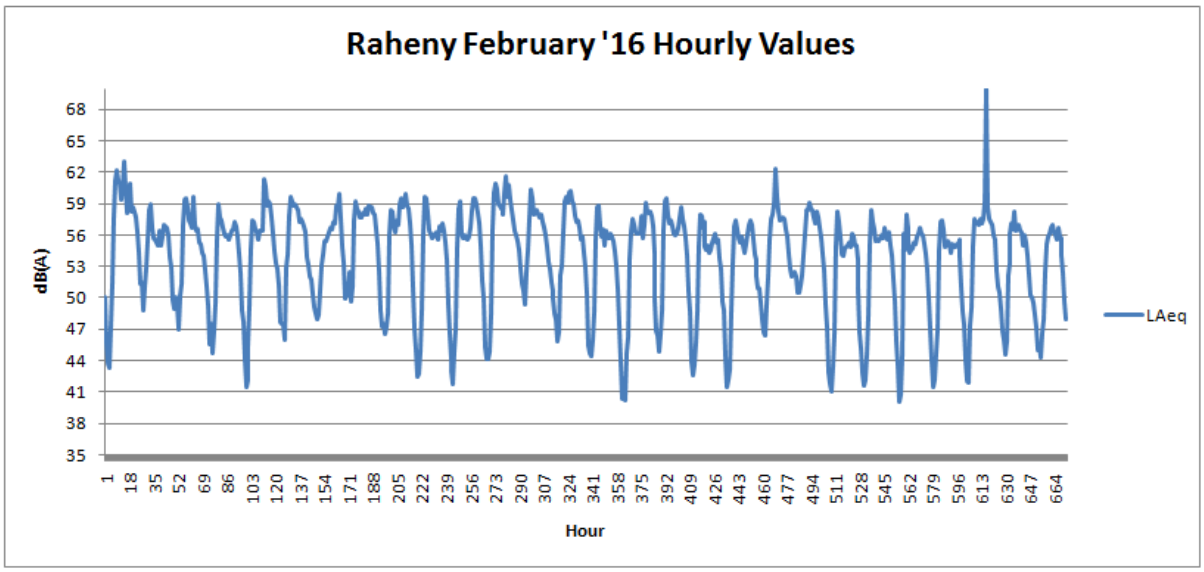
RAHENY LIBRARY

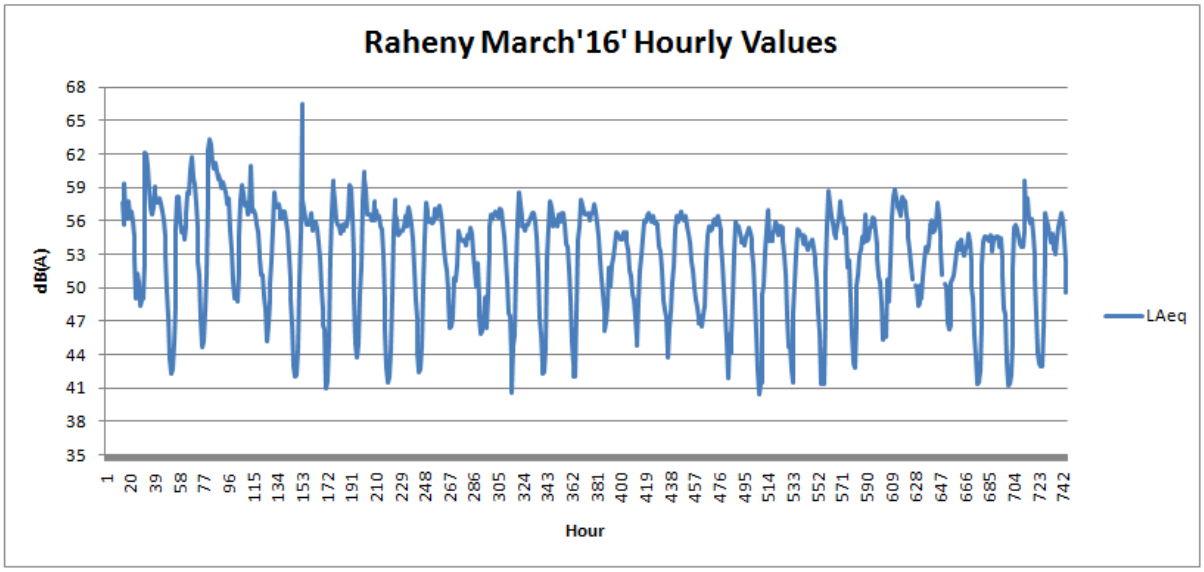
HOWTH ROAD

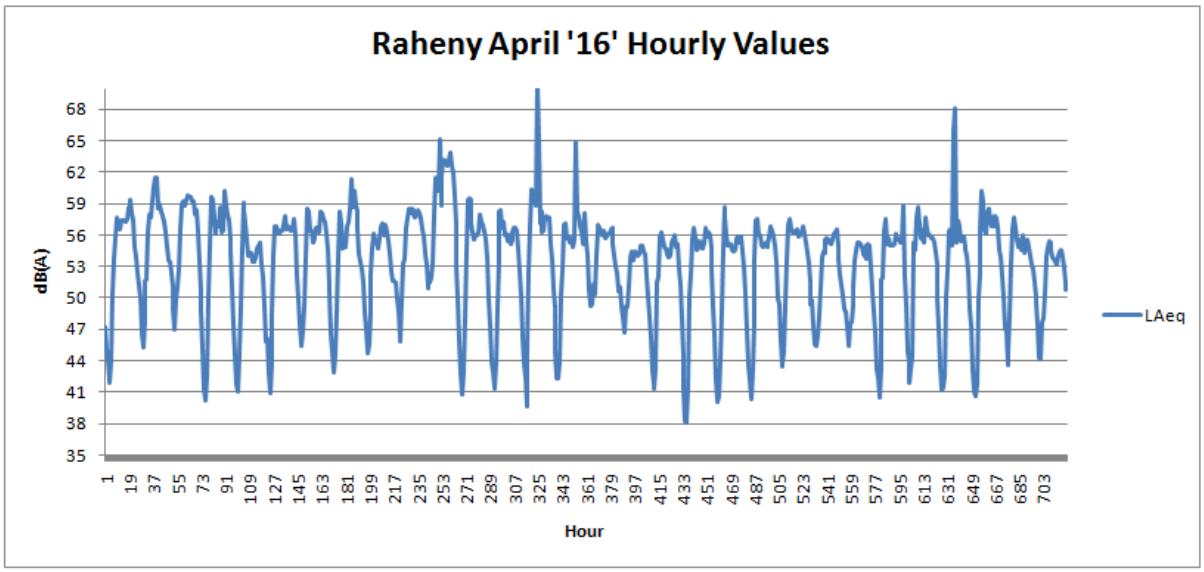
DUBLIN 5

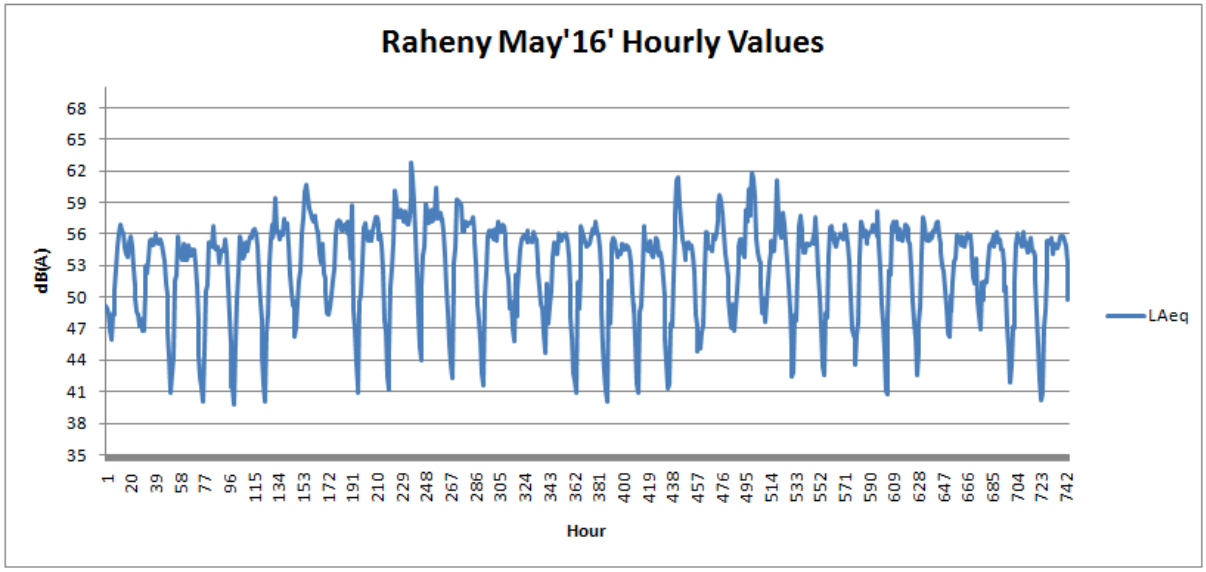

Raheny Hourly Values - 2016
dB(A)
85
80
75
70
65
60
55
50
45
40
35
Hourly Values
Median
Hour Number

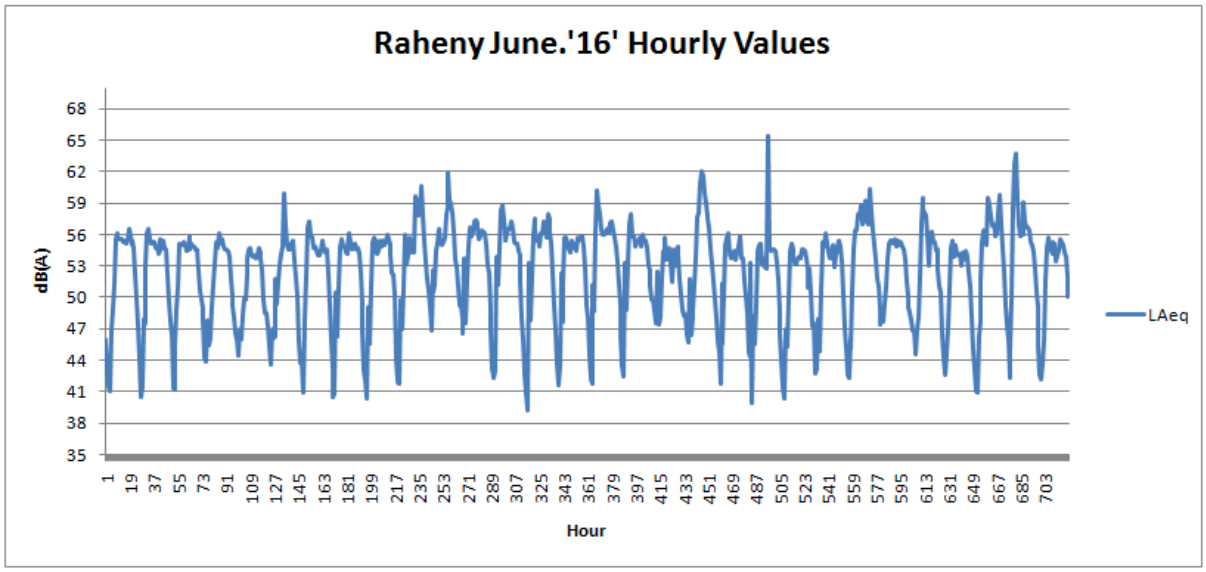

Raheny January'16' Hourly Values
dB(A)
Hour
LAeq

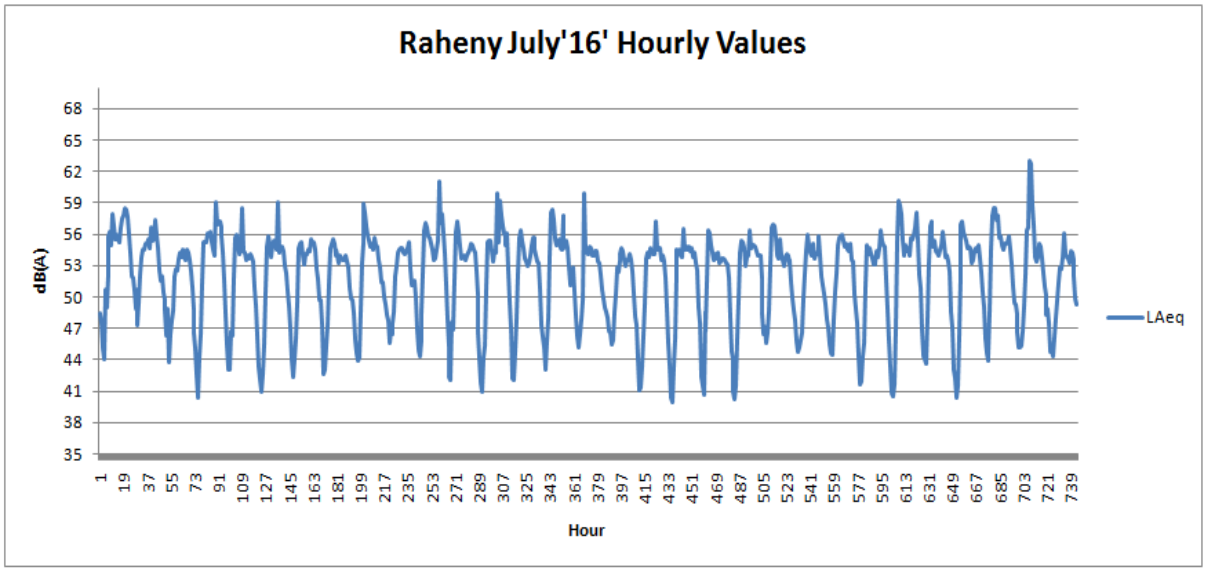

Raheny February '16 Hourly Values
dB(A)
Hour
LAeq

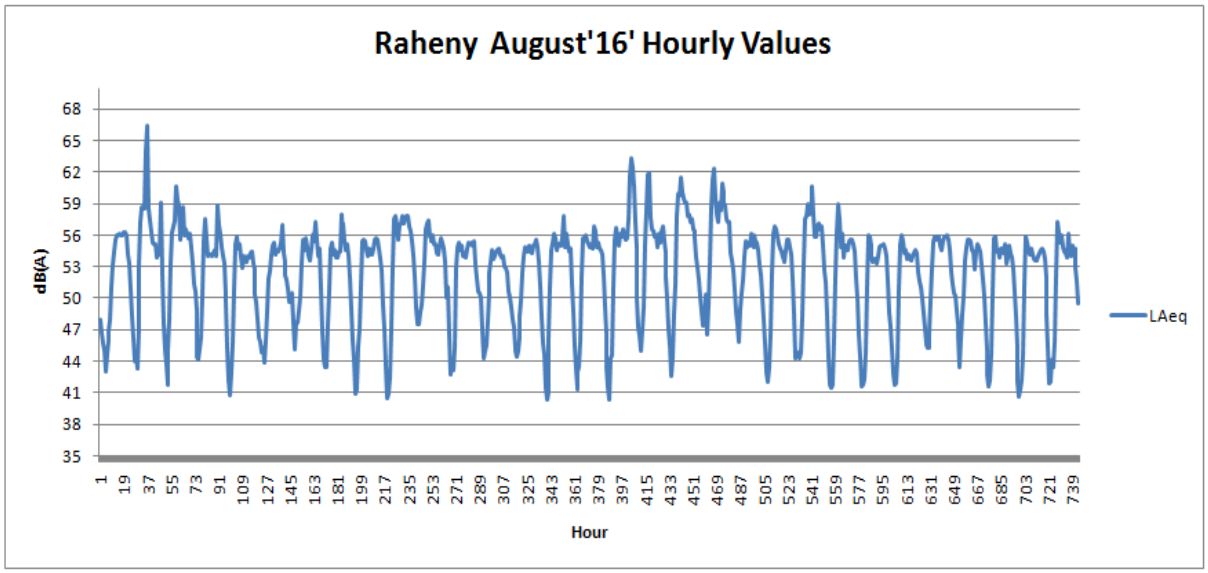

Raheny March'16' Hourly Values
dB(A)
Hour
LAeq

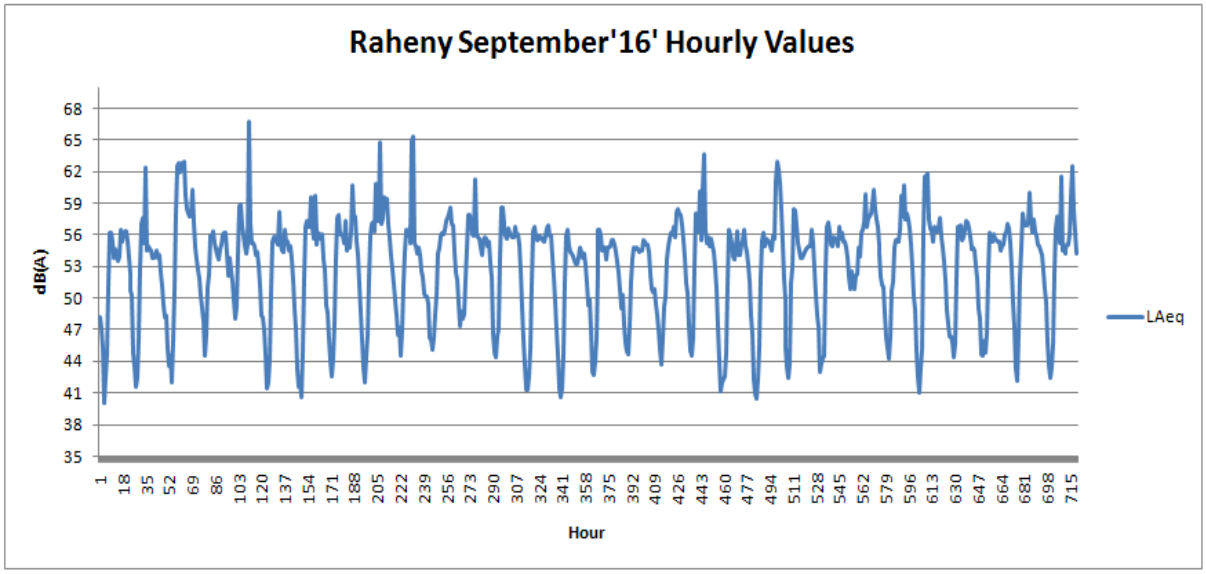

Raheny April '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
Hour
LAeq

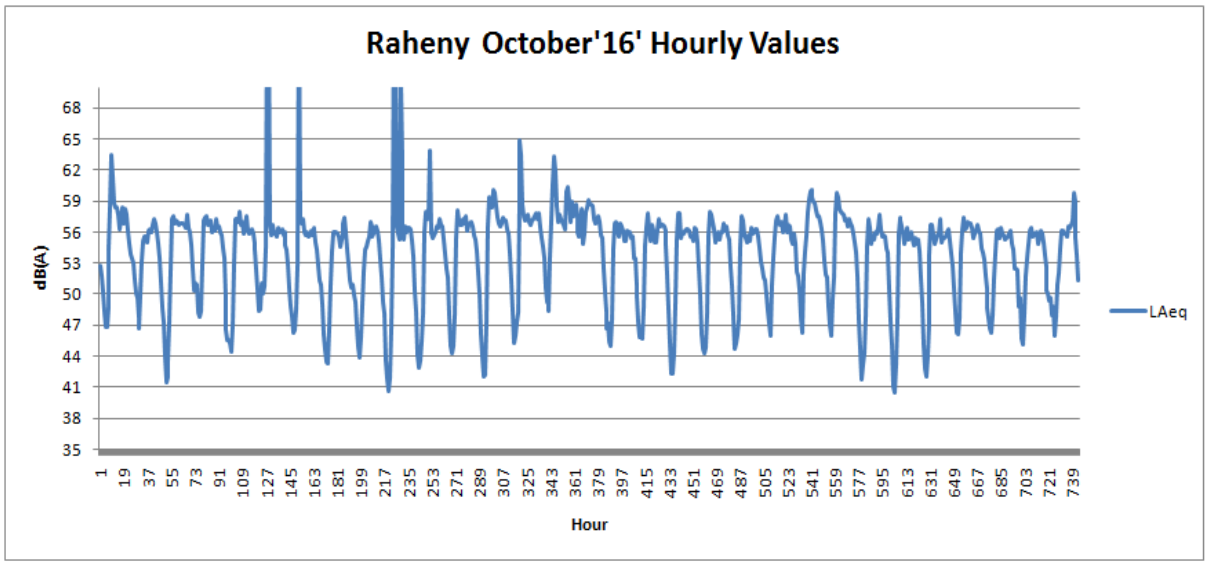

Raheny May'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
20
39
58
77
96
115
134
153
172
191
210
229
248
267
286
305
324
343
362
381
400
419
438
457
476
495
514
533
552
571
590
609
628
647
666
685
704
723
742
Hour
LAeq

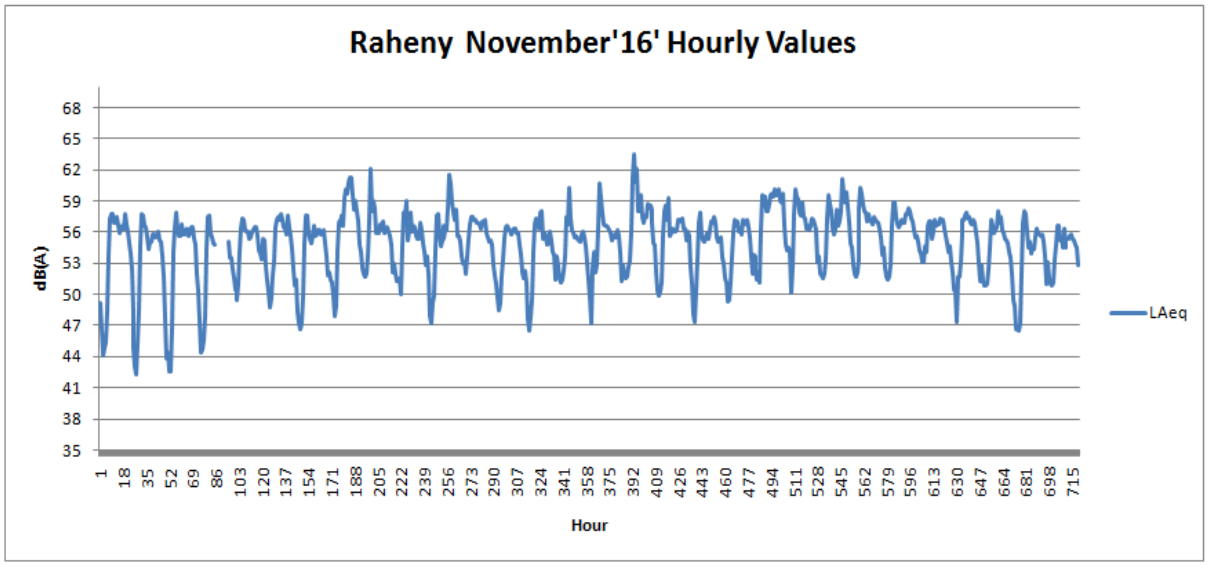

Raheny June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
Hour
LAeq

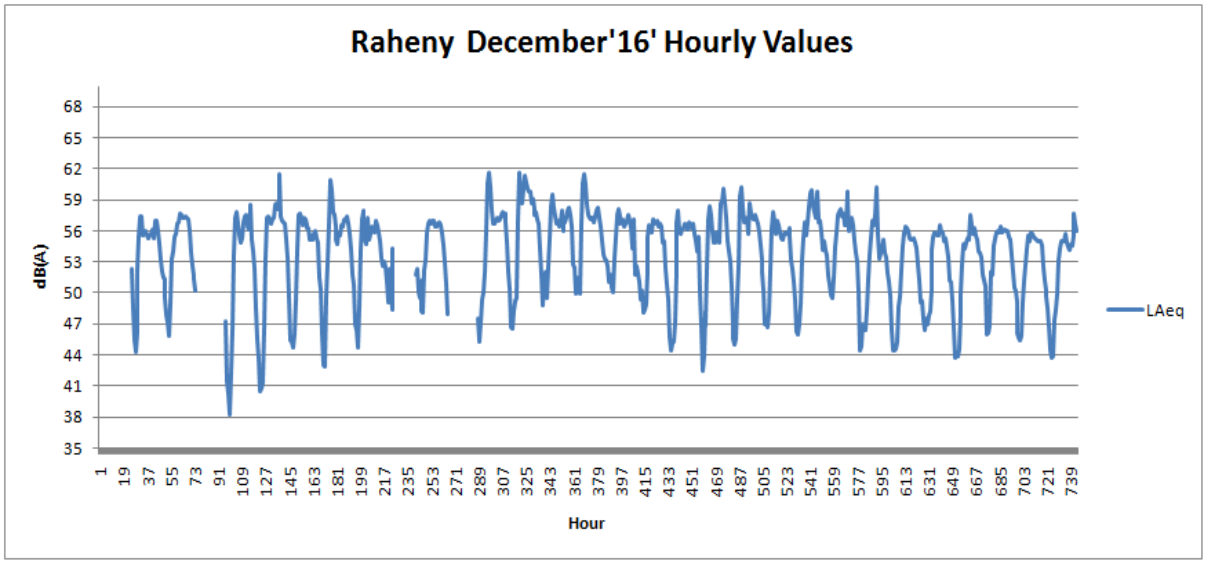

Raheny July'16' Hourly Values
dB(A)
Hour
LAeq


Raheny August'16' Hourly Values
dB(A)
Hour
LAeq


Raheny September'16' Hourly Values
dB(A)
Hour
LAeq


Raheny October'16' Hourly Values
dB(A)
Hour
LAeq

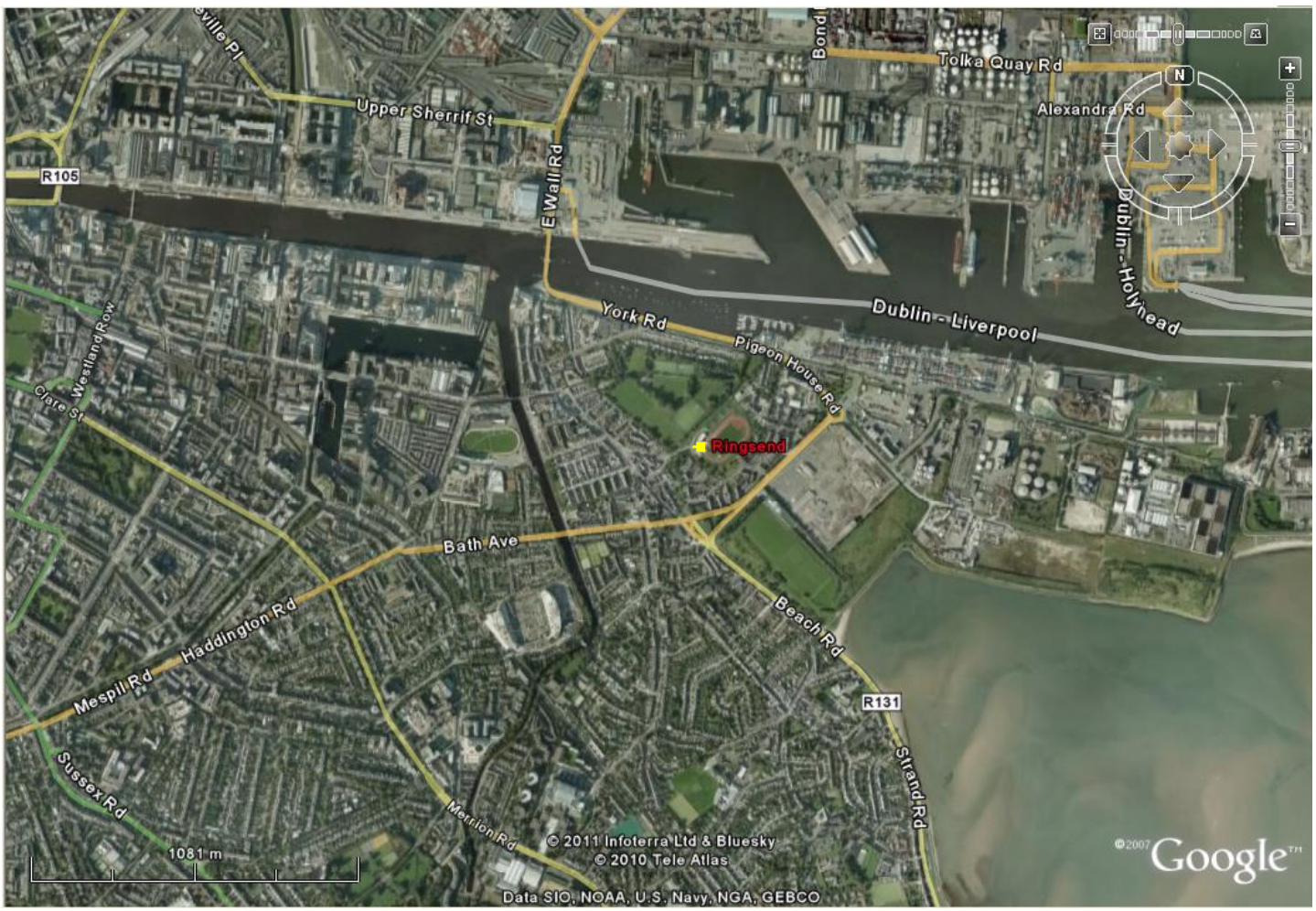

Raheny November'16' Hourly Values
dB(A)
Hour
LAeq

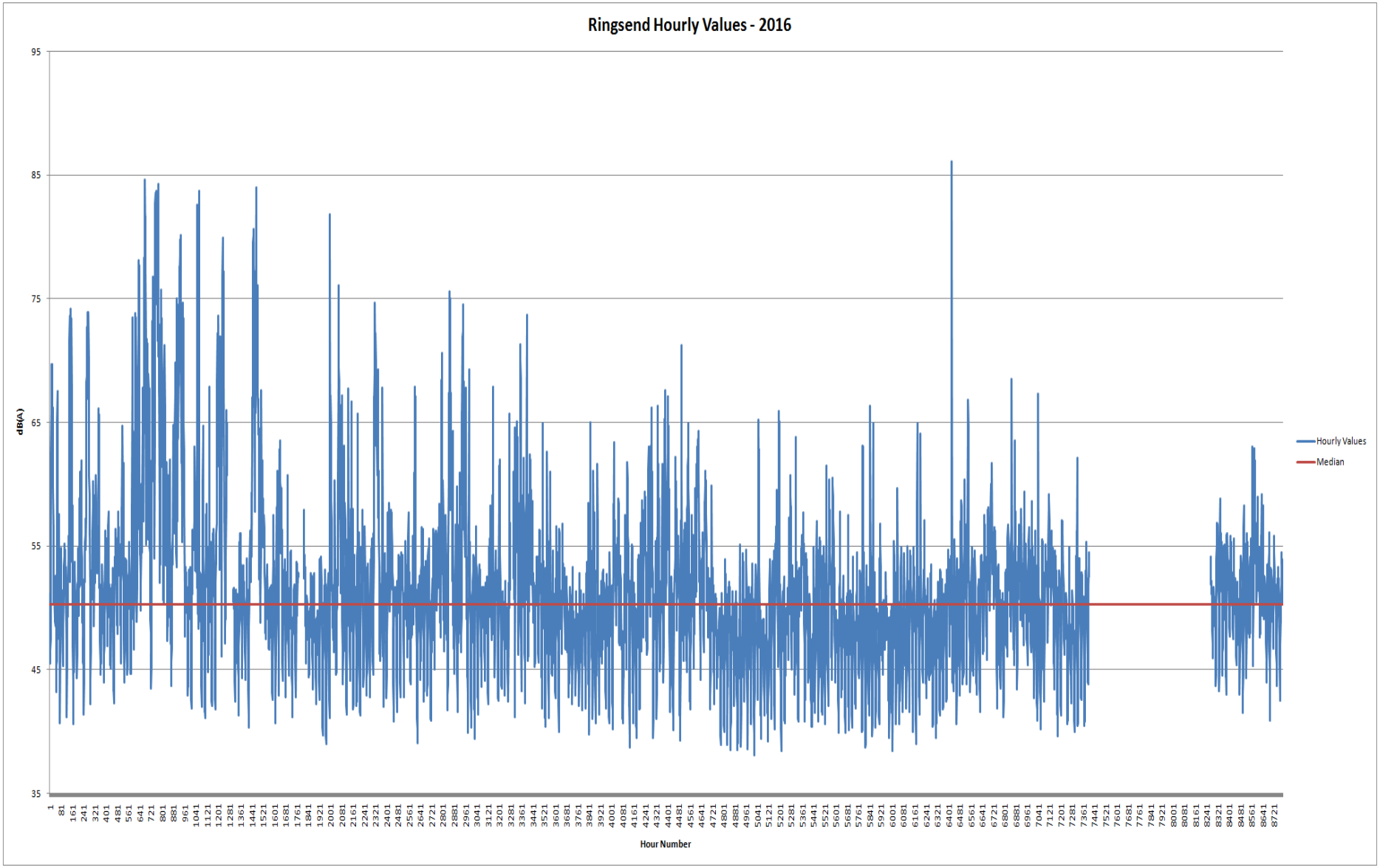

Raheny December'16' Hourly Values
dB(A)
Hour
LAeq

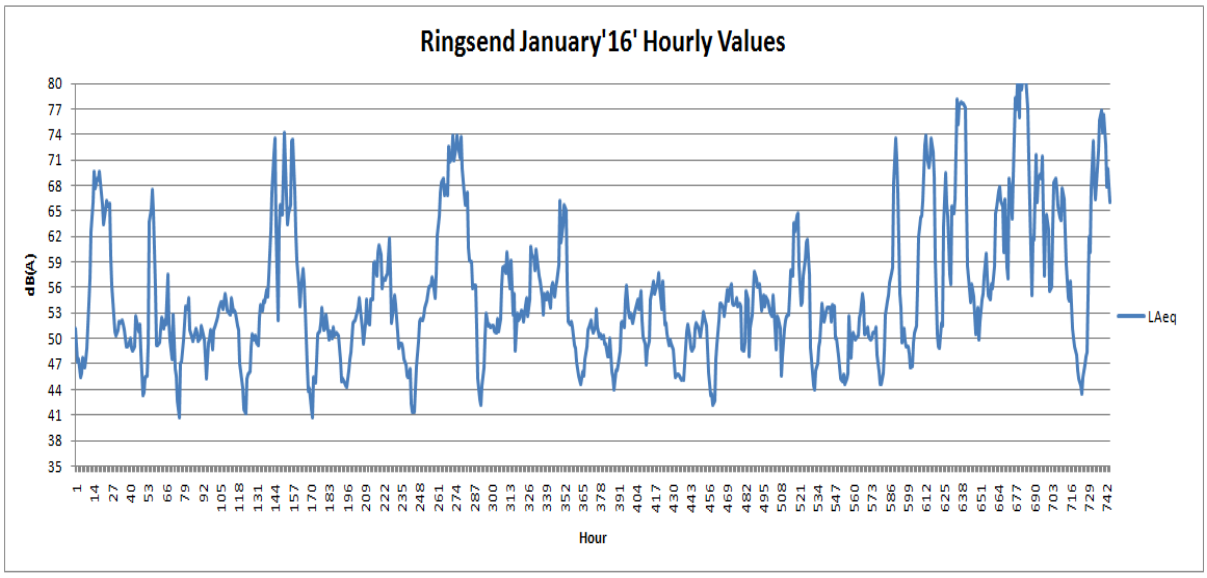
IRISHTOWN SPORTS CENTRE

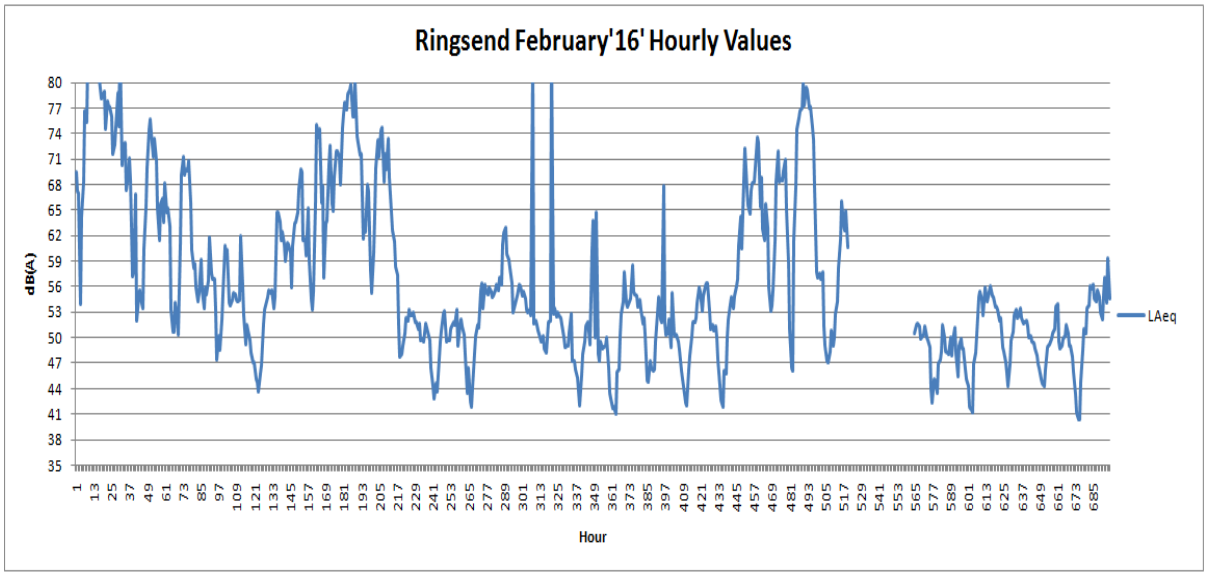
RINGSEND

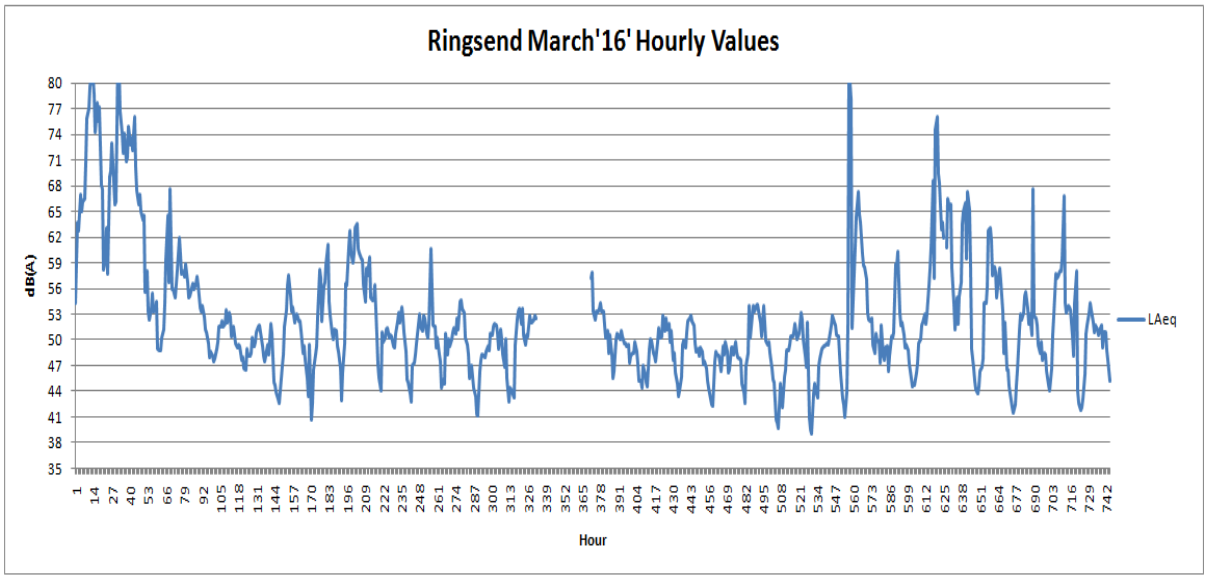
DUBLIN 4

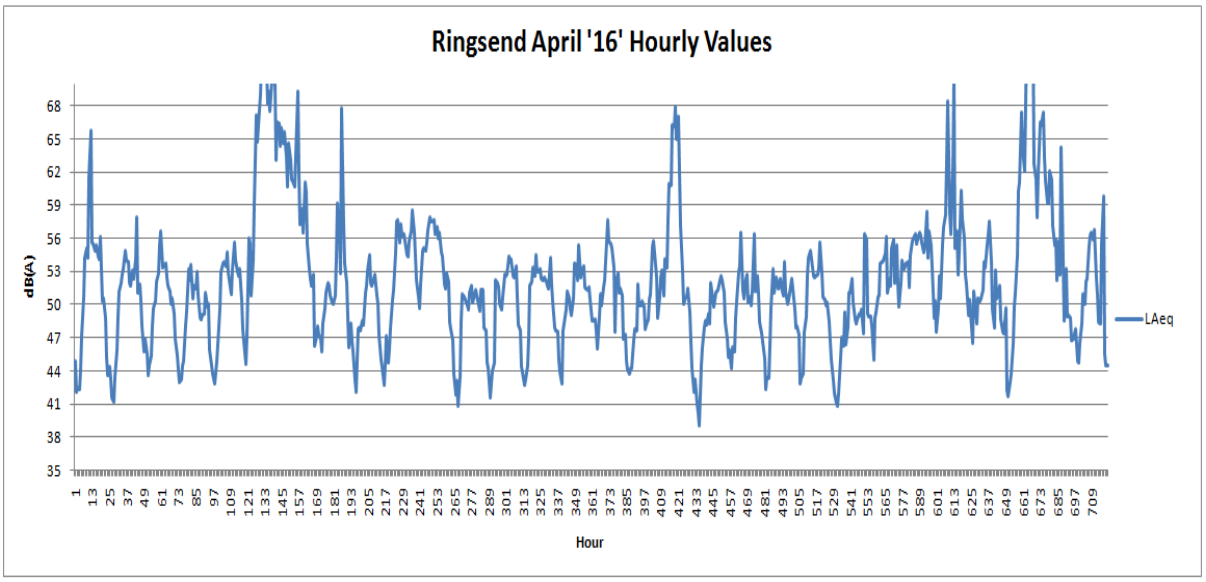


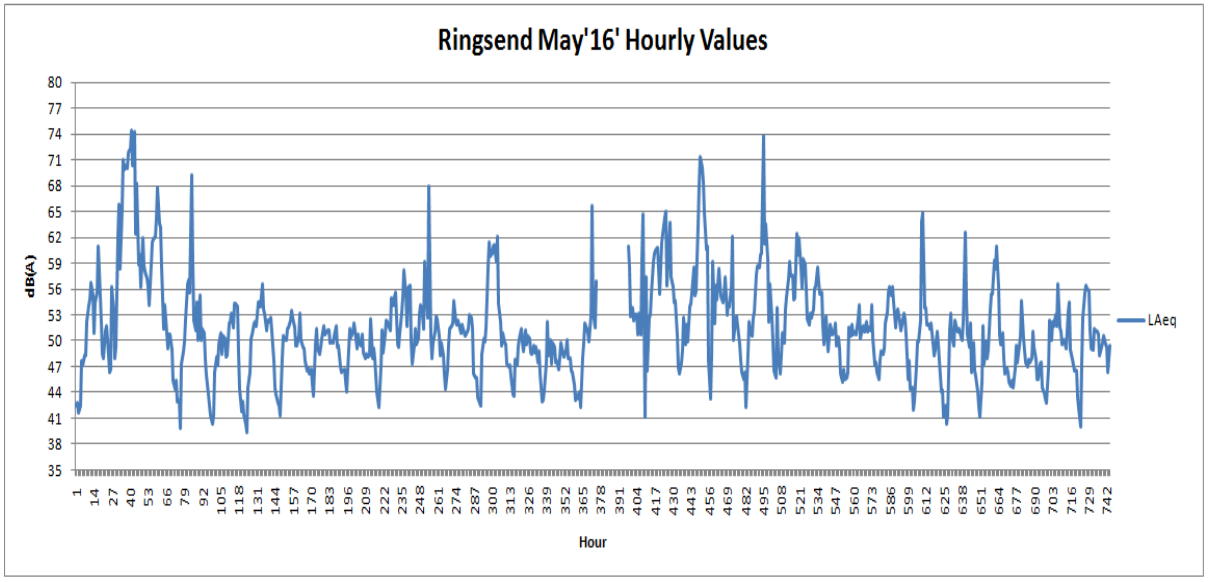

Ringsend Hourly Values - 2016
dB(A)
95
85
75
65
55
45
35
Hour Number
Hourly Values
Median

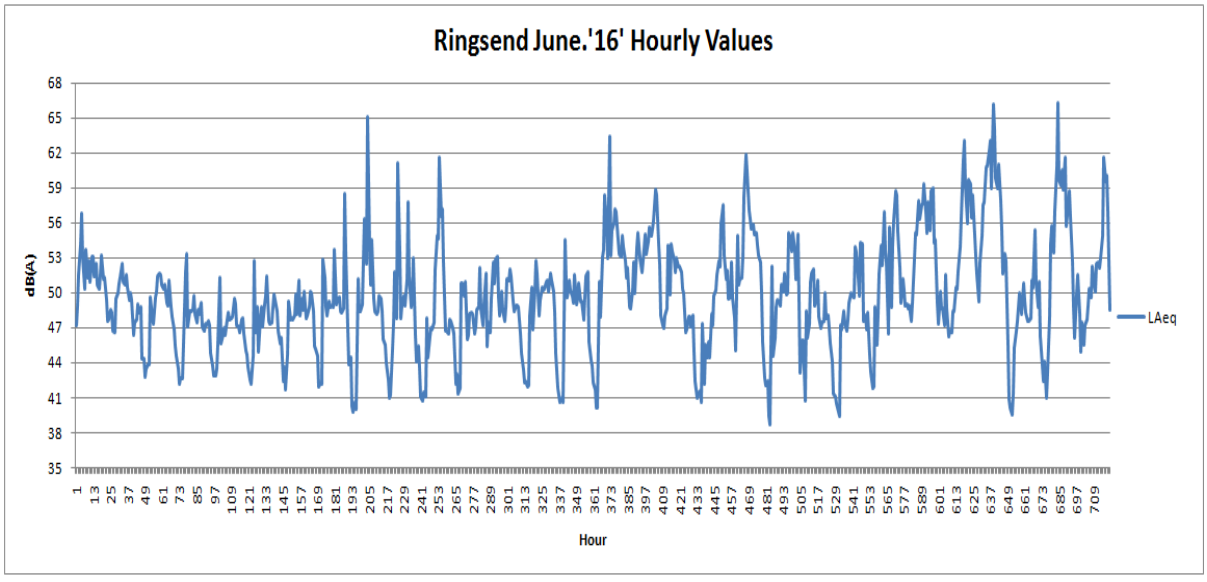

Ringsend January'16' Hourly Values
dB(A)
Hour
LAeq

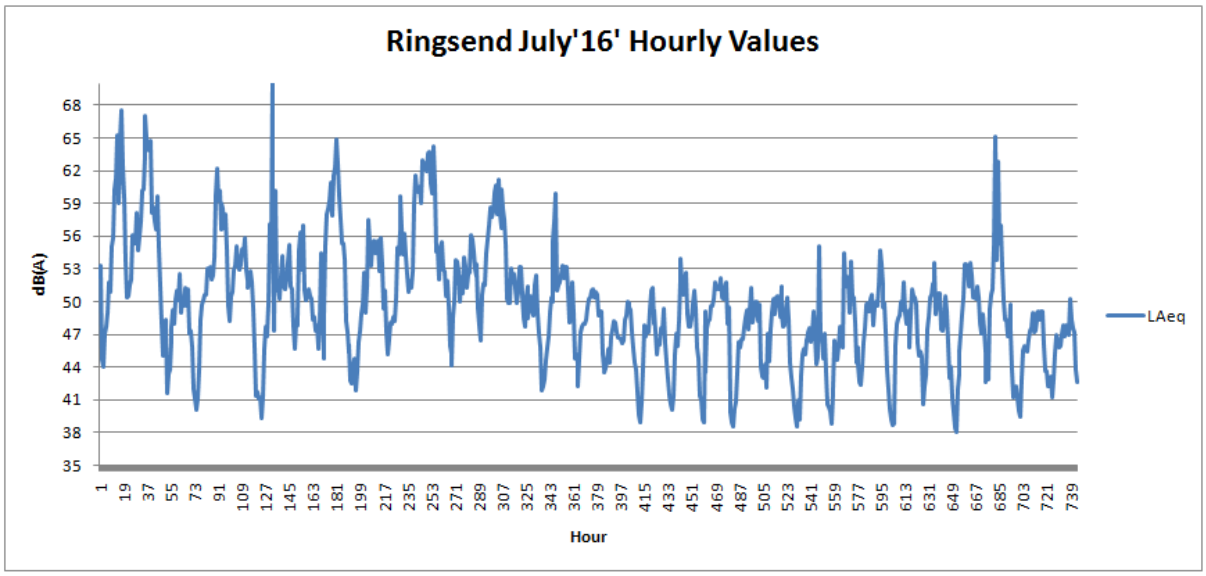

Ringsend February'16' Hourly Values
dB(A)
Hour
LAeq

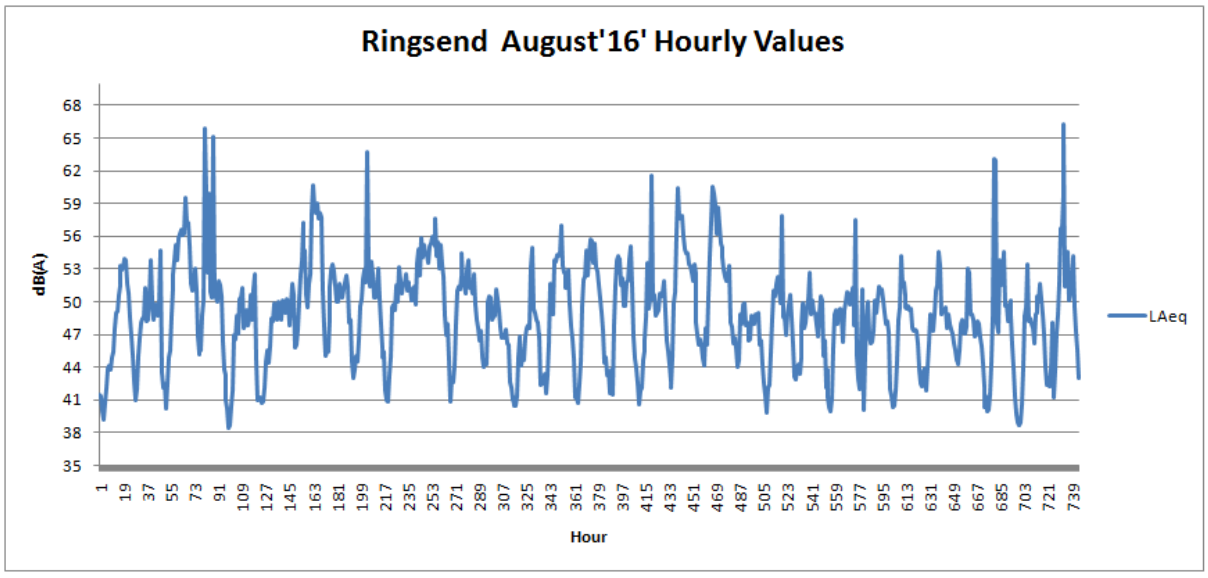

Ringsend March'16' Hourly Values
dB(A)
Hour
LAeq

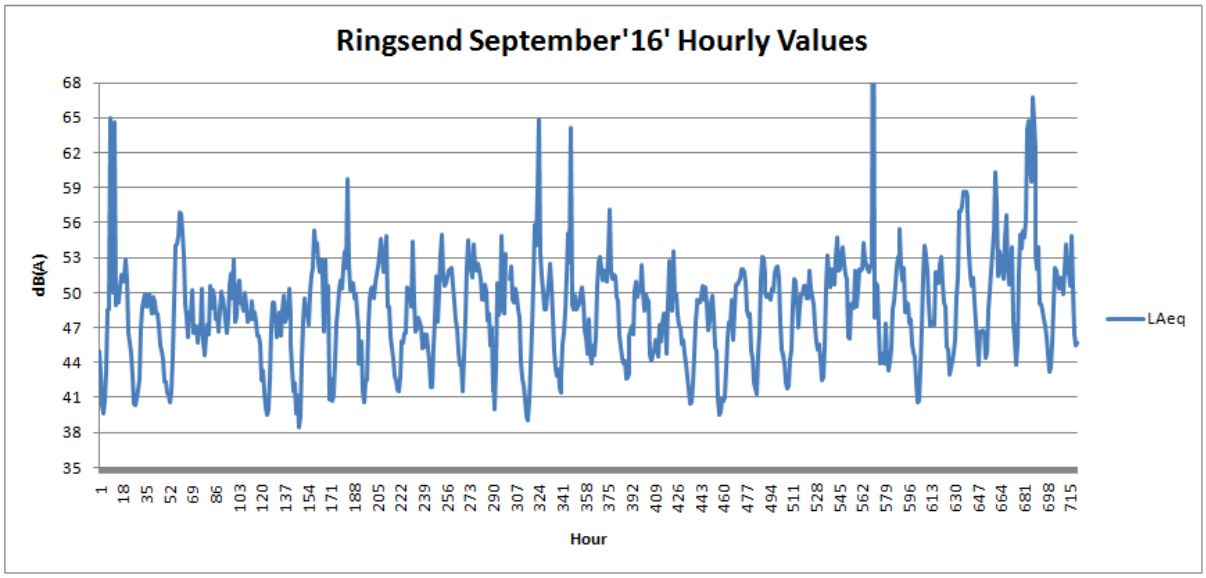

Ringsend April '16' Hourly Values
dB(A)
Hour
LAeq

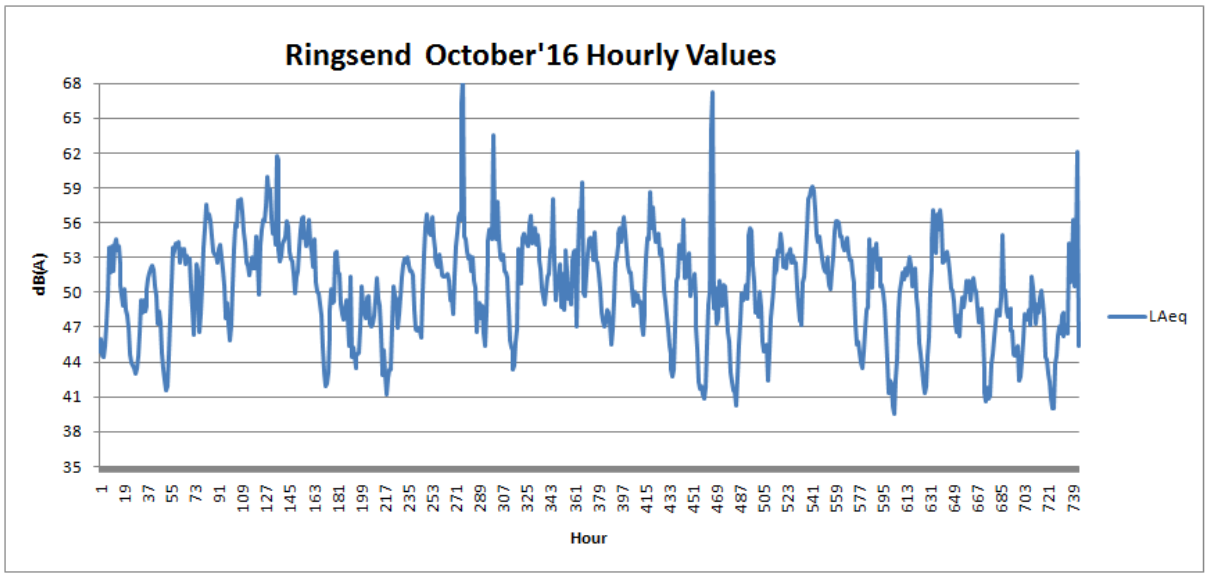

Ringsend May'16' Hourly Values
dB(A)
Hour
LAeq

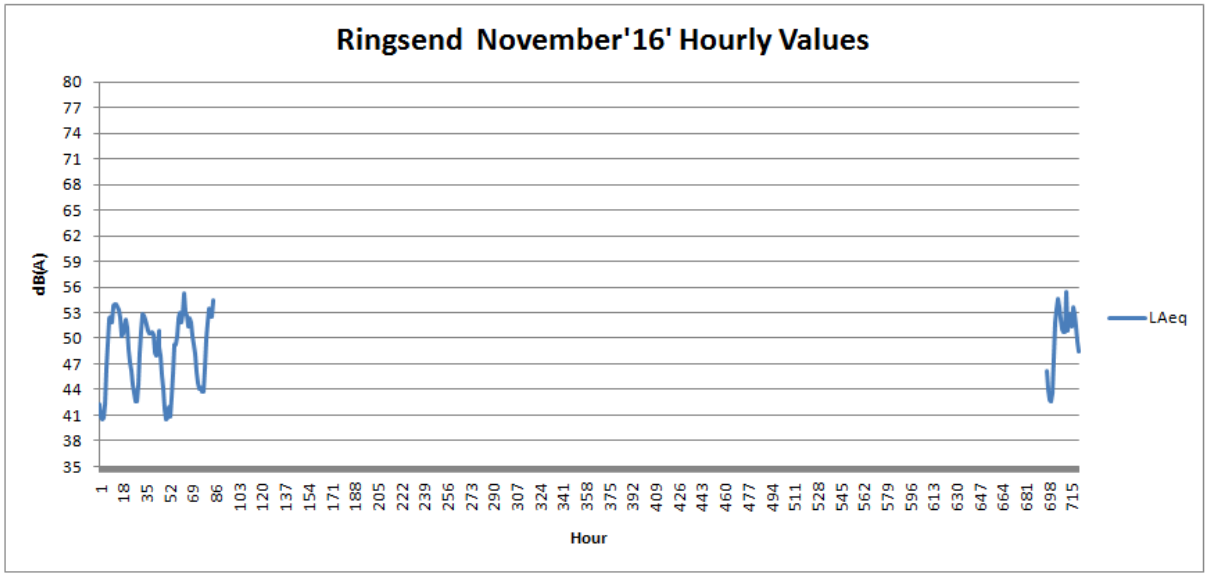

Ringsend June.'16' Hourly Values
dB(A)
Hour
LAeq

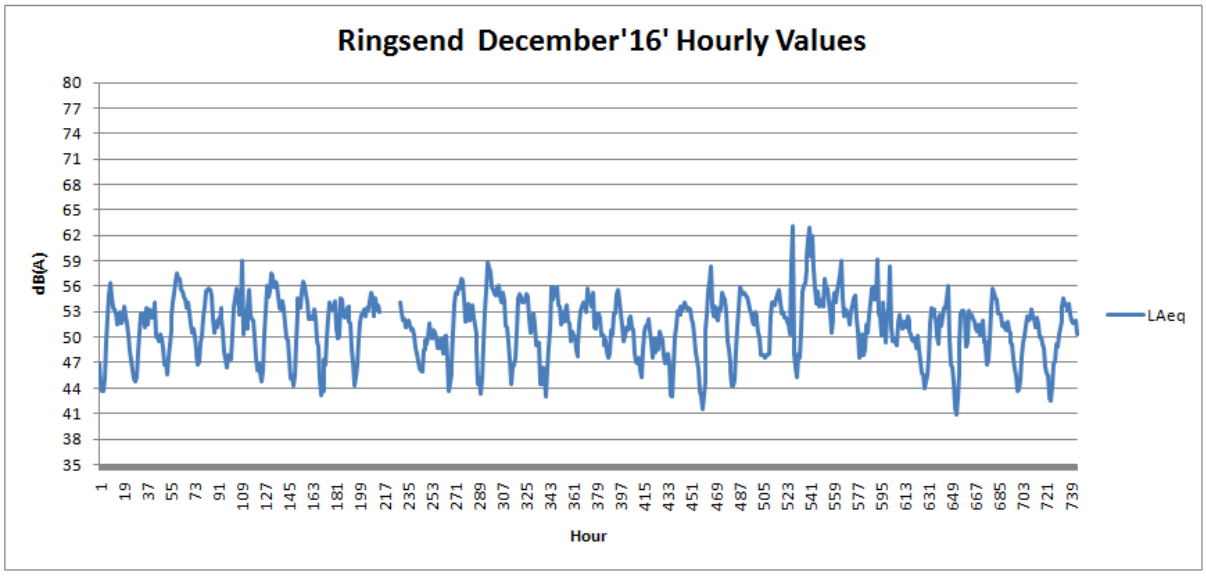

Ringsend July'16' Hourly Values
dB(A)
Hour
LAeq


Ringsend August'16' Hourly Values
dB(A)
Hour
LAeq


Ringsend September'16' Hourly Values
dB(A)
Hour
LAeq


Ringsend October'16 Hourly Values
dB(A)
Hour
LAeq

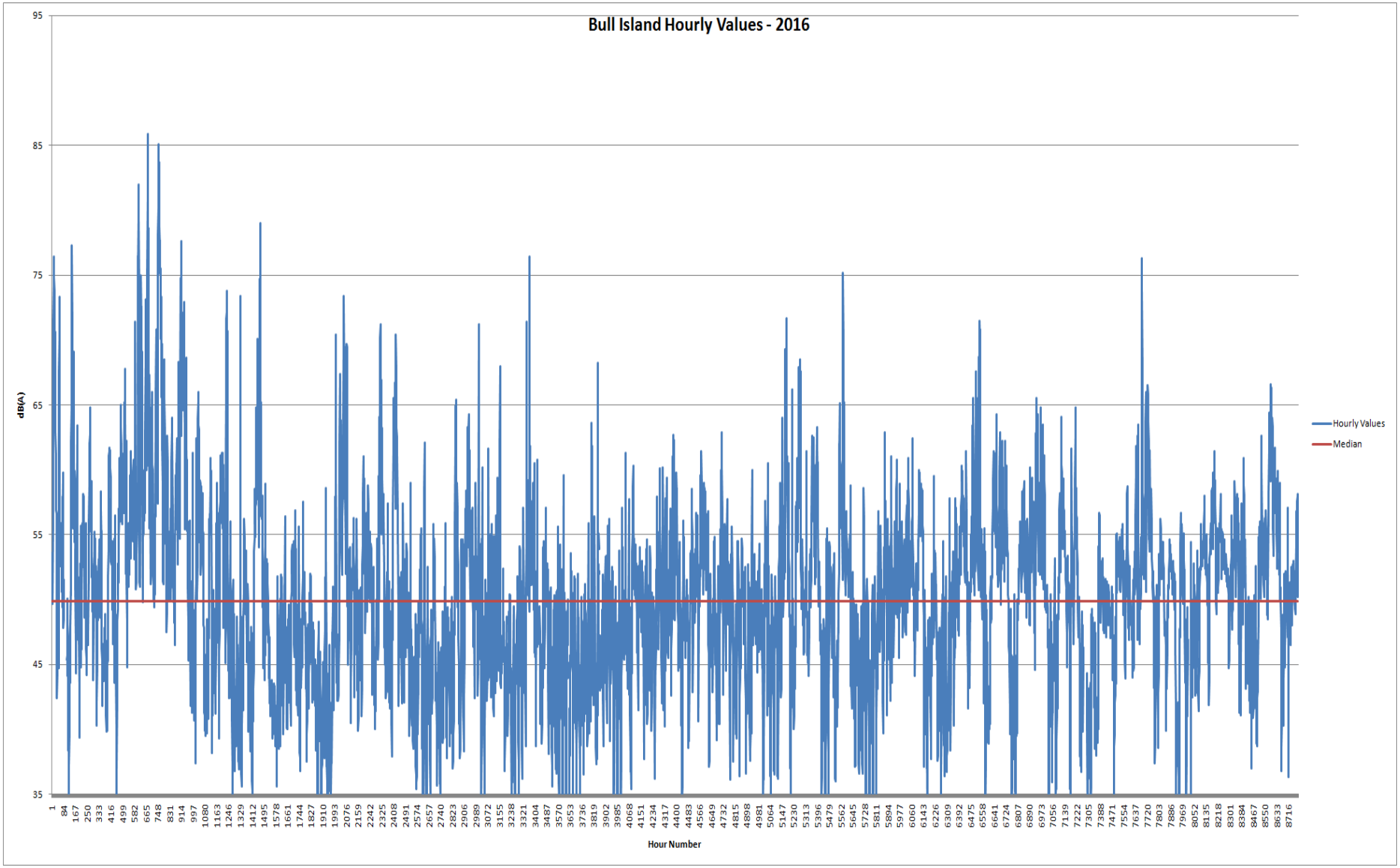

Ringsend November'16' Hourly Values
dB(A)
Hour
LAeq

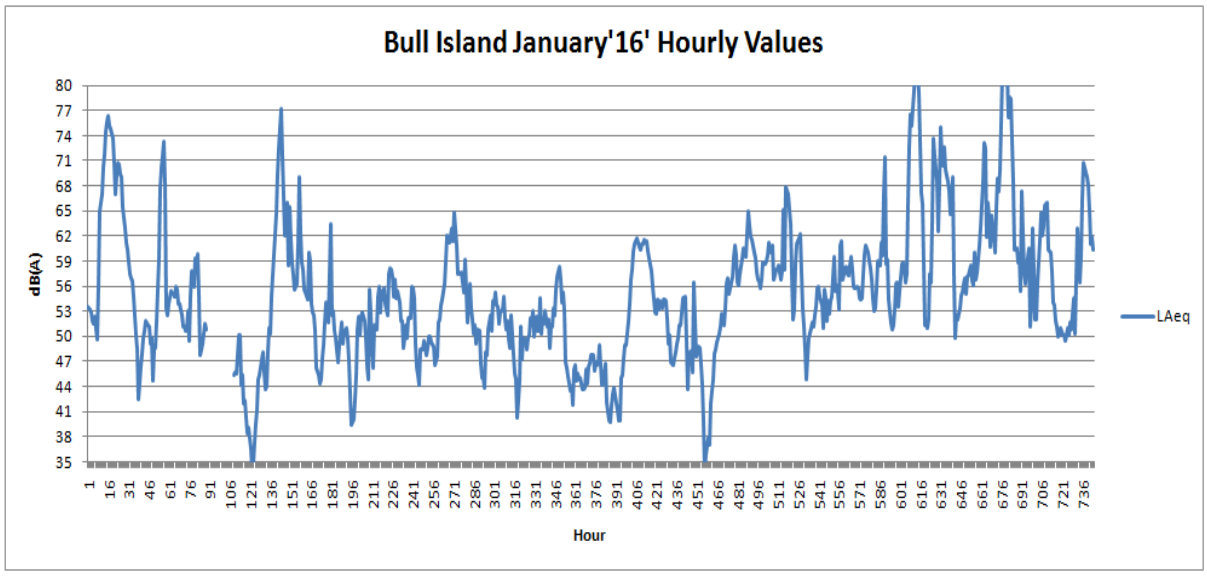

Ringsend December'16' Hourly Values
dB(A)
Hour
LAeq

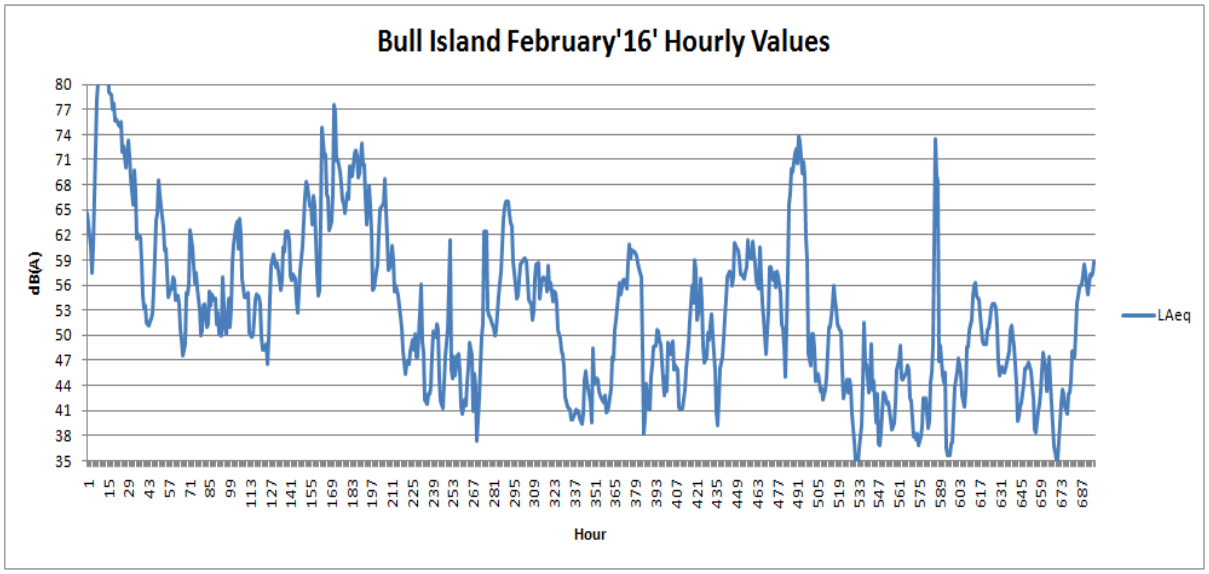
BULL ISLAND INTERPRETATIVE CENTRE

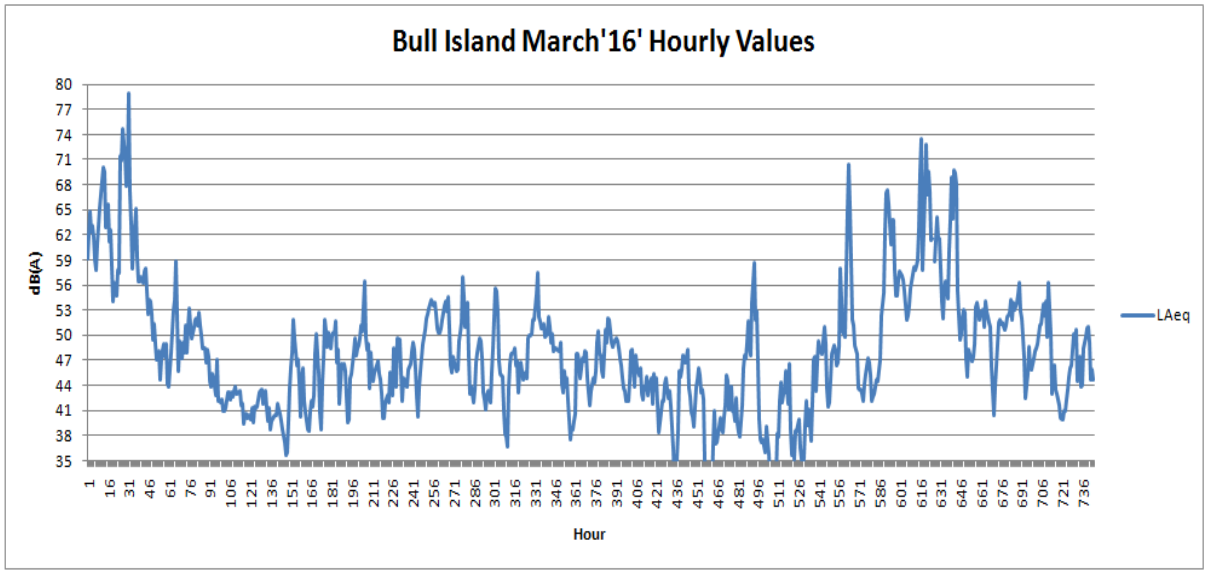
BULL ISLAND

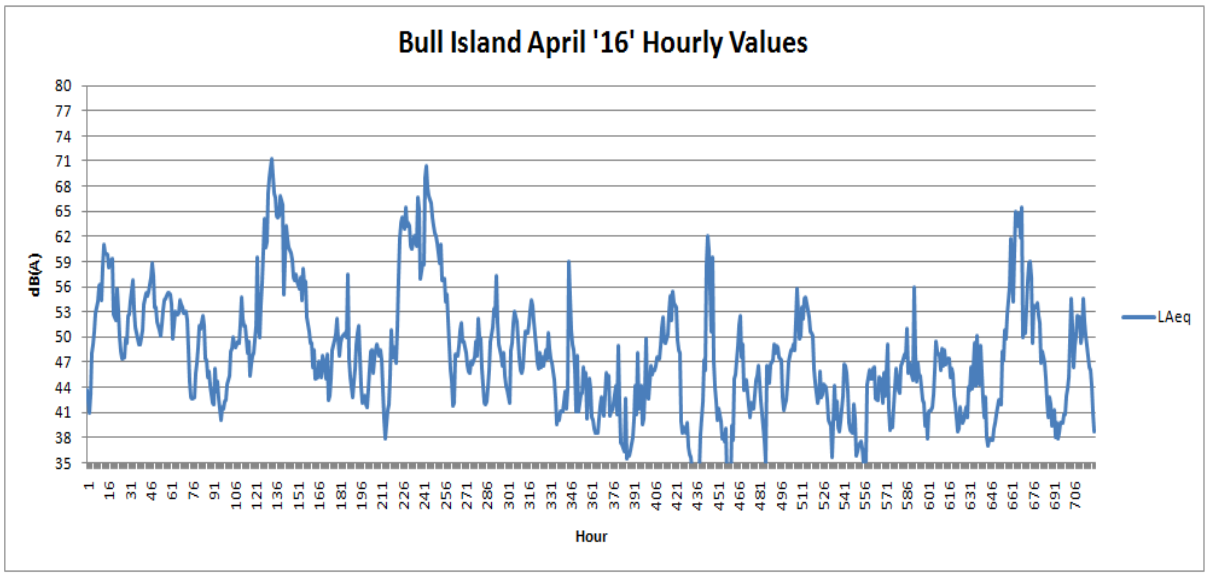
DUBLIN 3

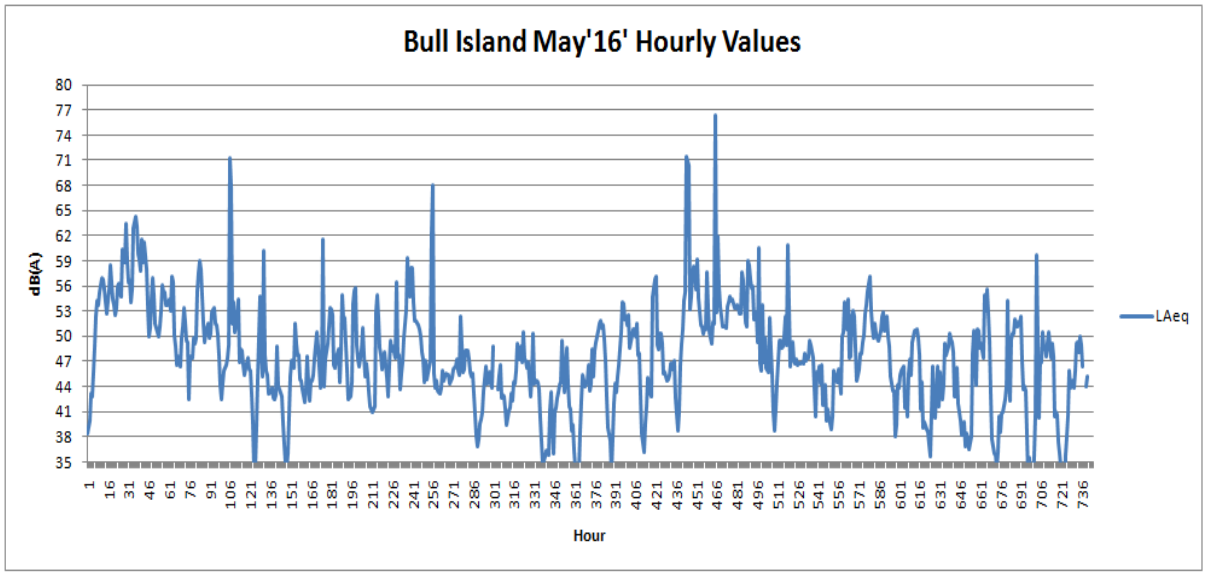

Bull Island Hourly Values - 2016
dB(A)
95
85
75
65
55
45
35
Hour Number
Hourly Values
Median

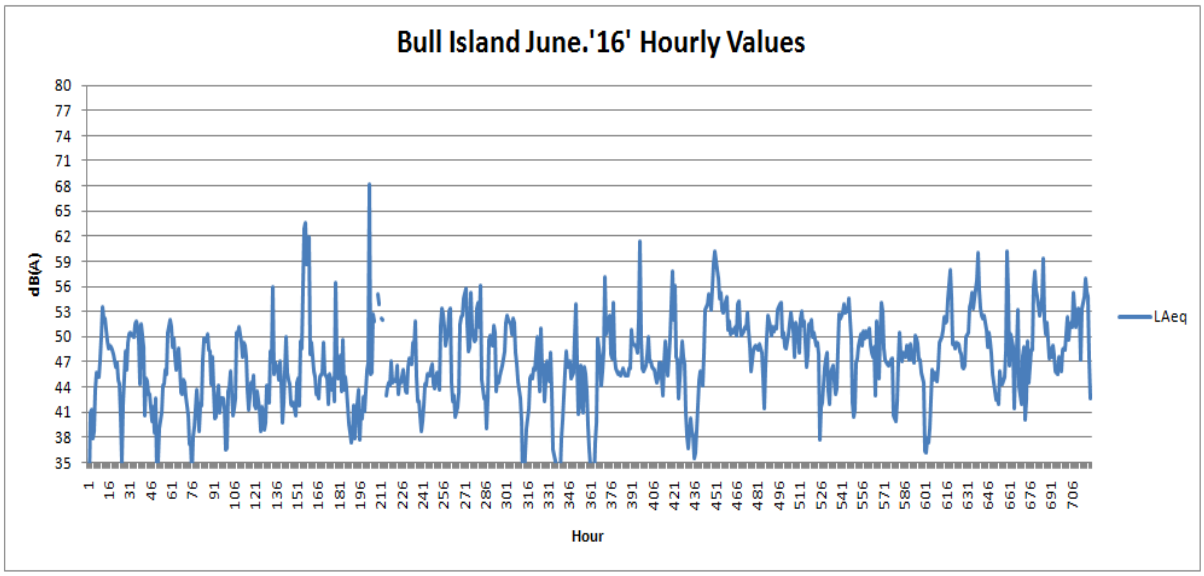

Bull Island January'16' Hourly Values
dB(A)
Hour
LAeq

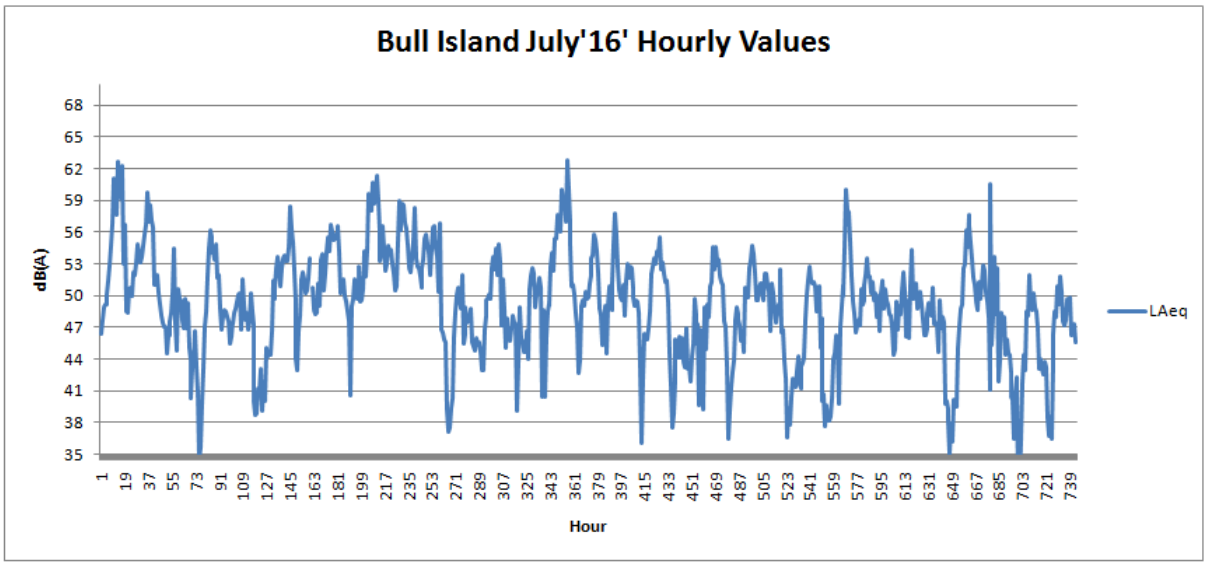

Bull Island February'16' Hourly Values
dB(A)
Hour
LAeq

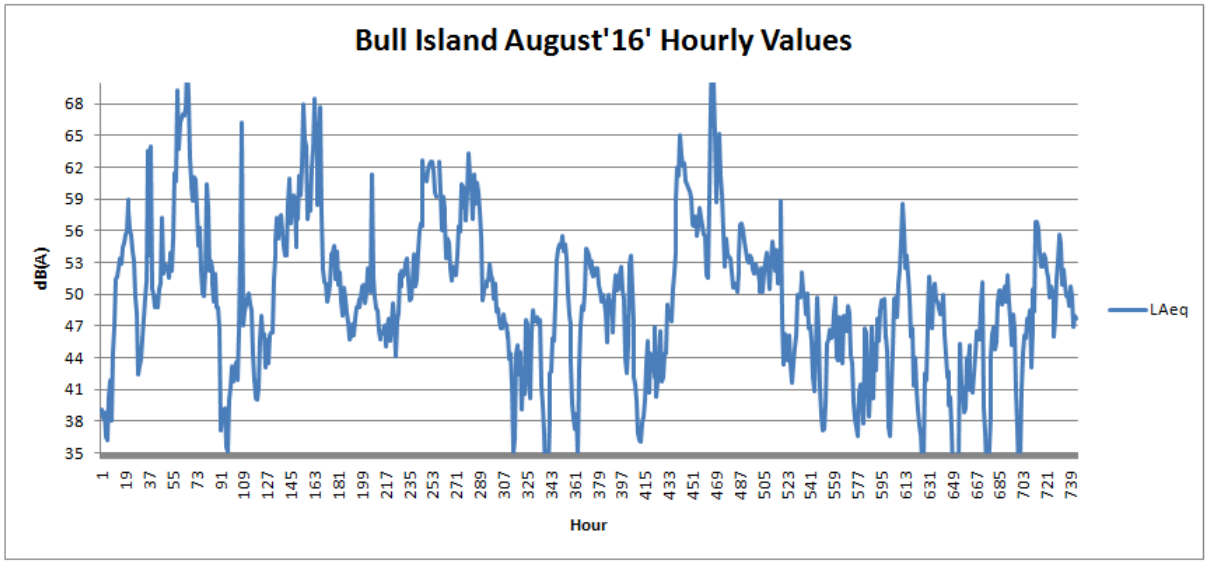

Bull Island March'16' Hourly Values
dB(A)
Hour
LAeq

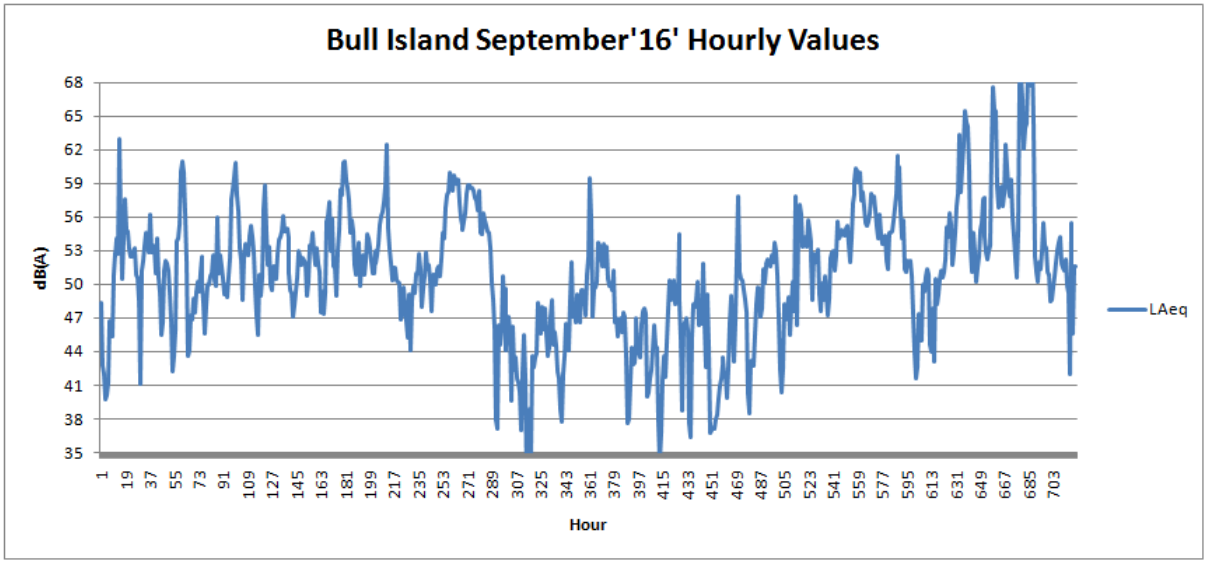

Bull Island April '16' Hourly Values
dB(A)
Hour
LAeq

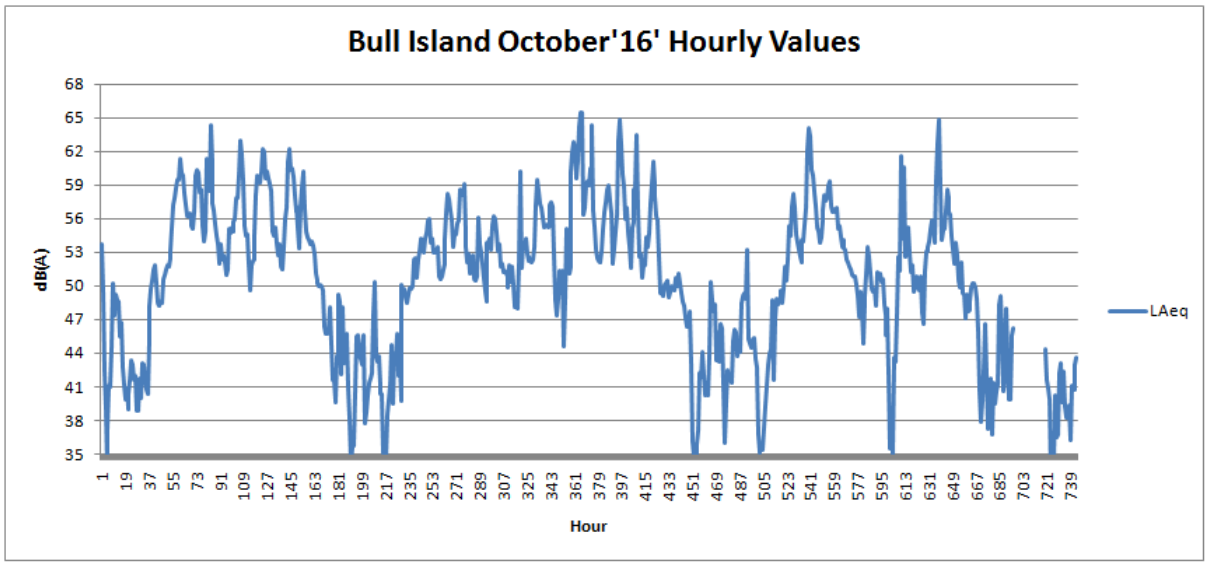

Bull Island May'16' Hourly Values
dB(A)
Hour
LAeq

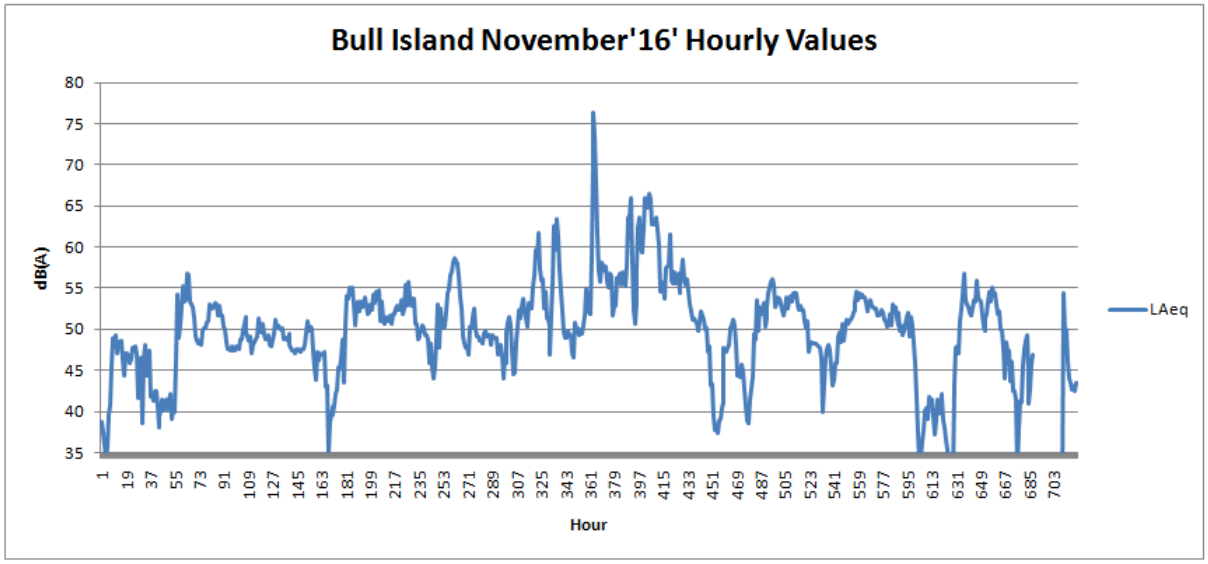

Bull Island June.'16' Hourly Values
dB(A)
Hour
LAeq

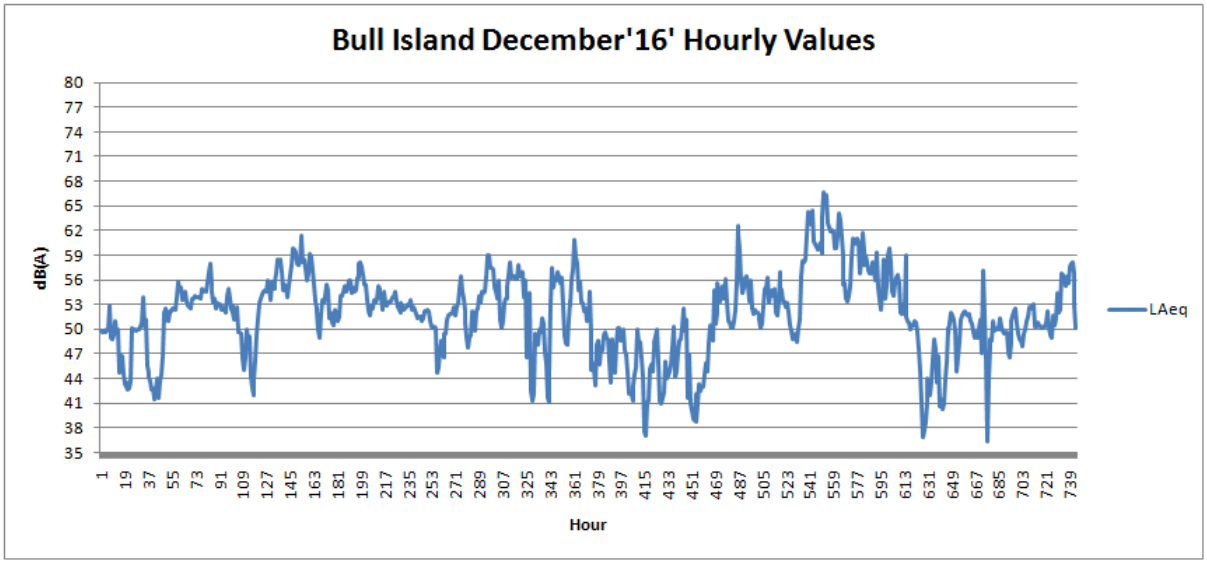

Bull Island July'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq


Bull Island August'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703 721 739
Hour
LAeq


Bull Island September'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq


Bull Island October'16' Hourly Values
dB(A)
Hour
LAeq

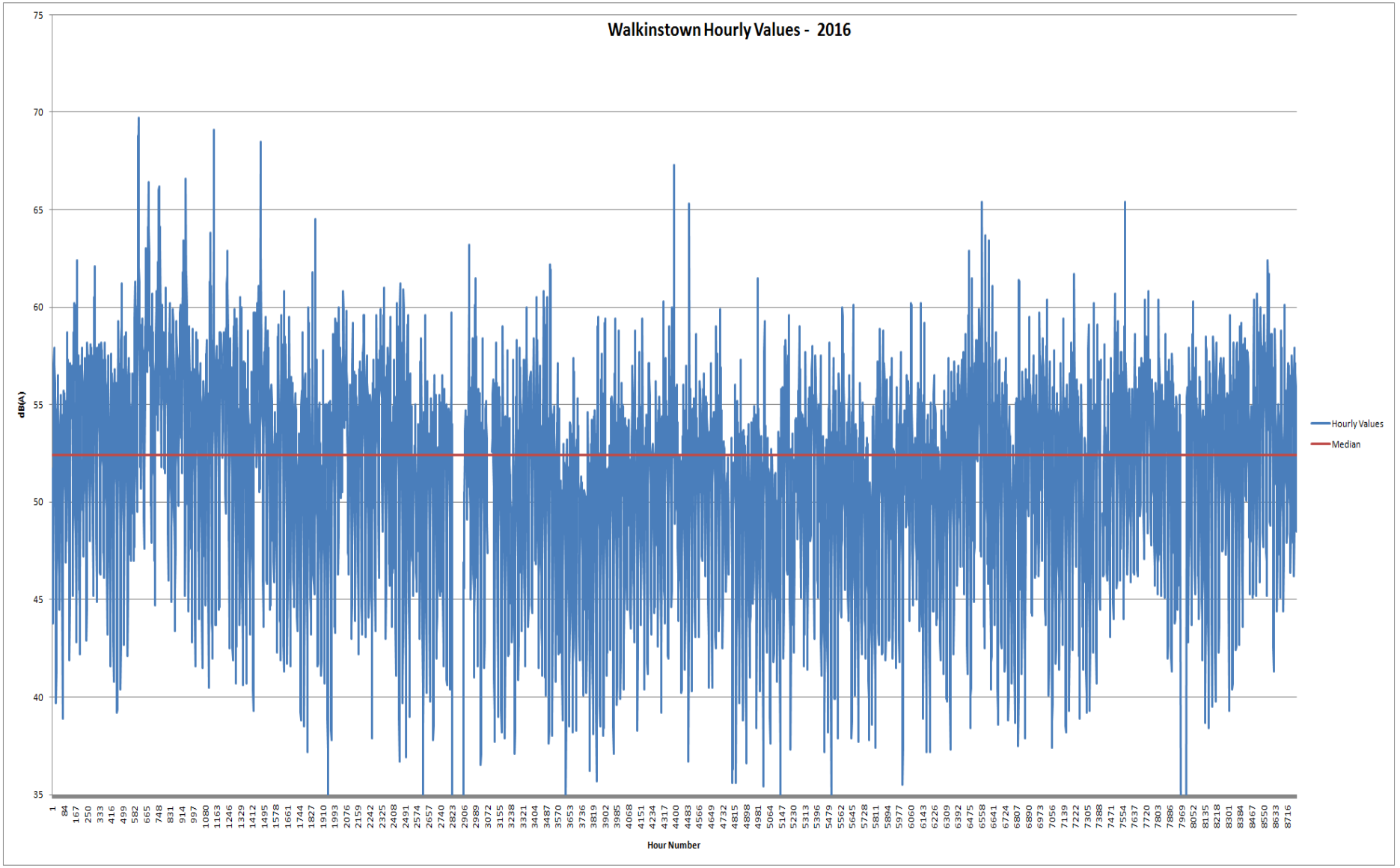

Bull Island November'16' Hourly Values
dB(A)
Hour
LAeq

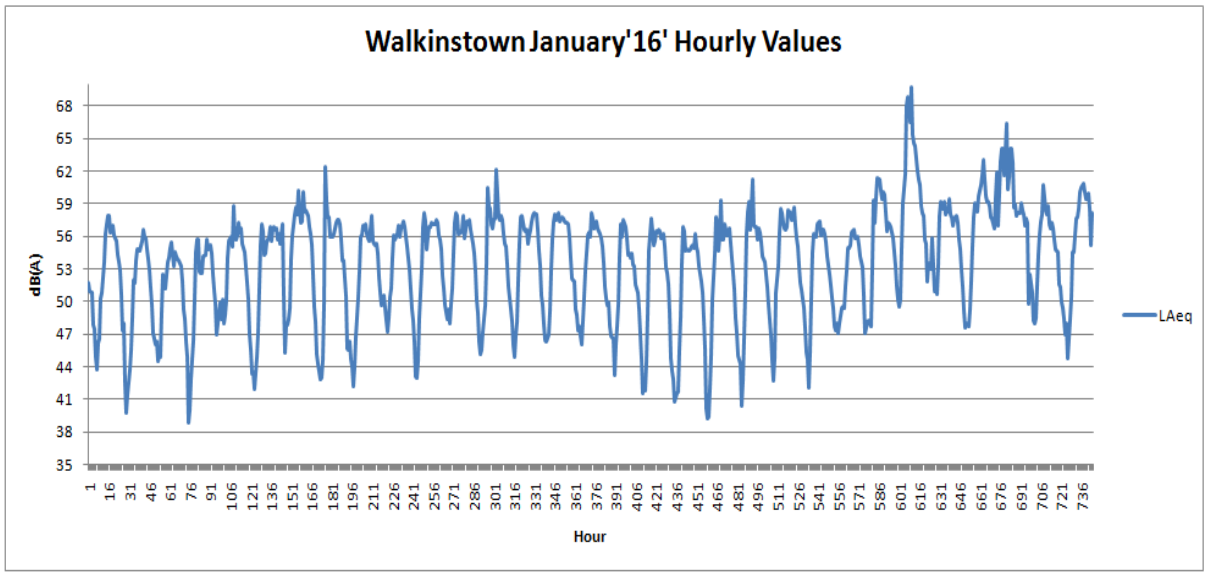

Bull Island December'16' Hourly Values
dB(A)
Hour
LAeq

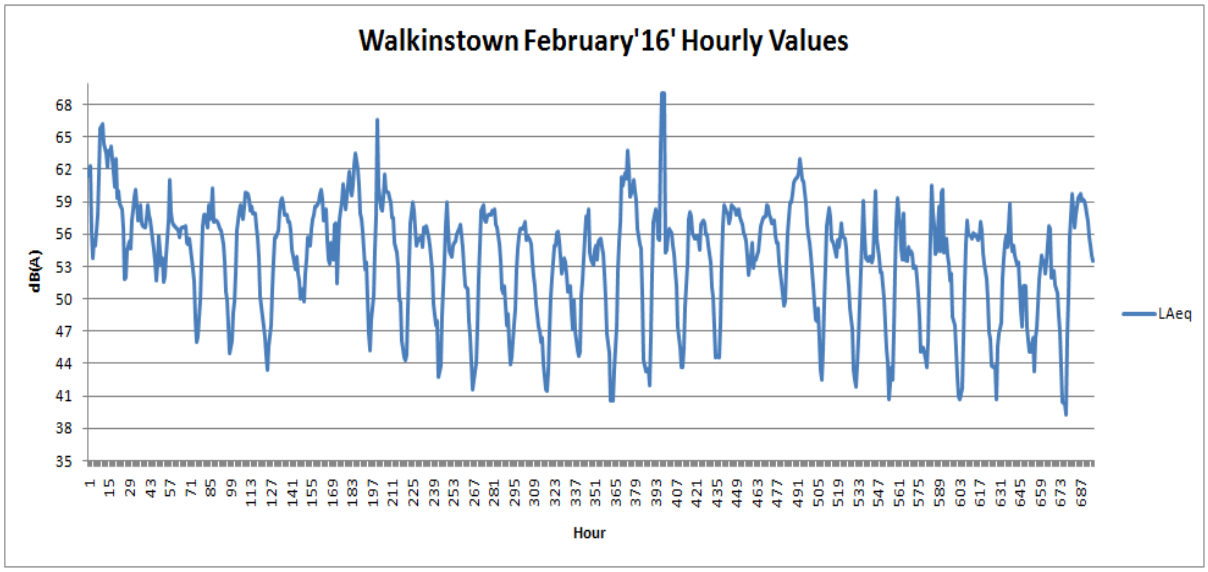
WALKINSTOWN LIBRARY

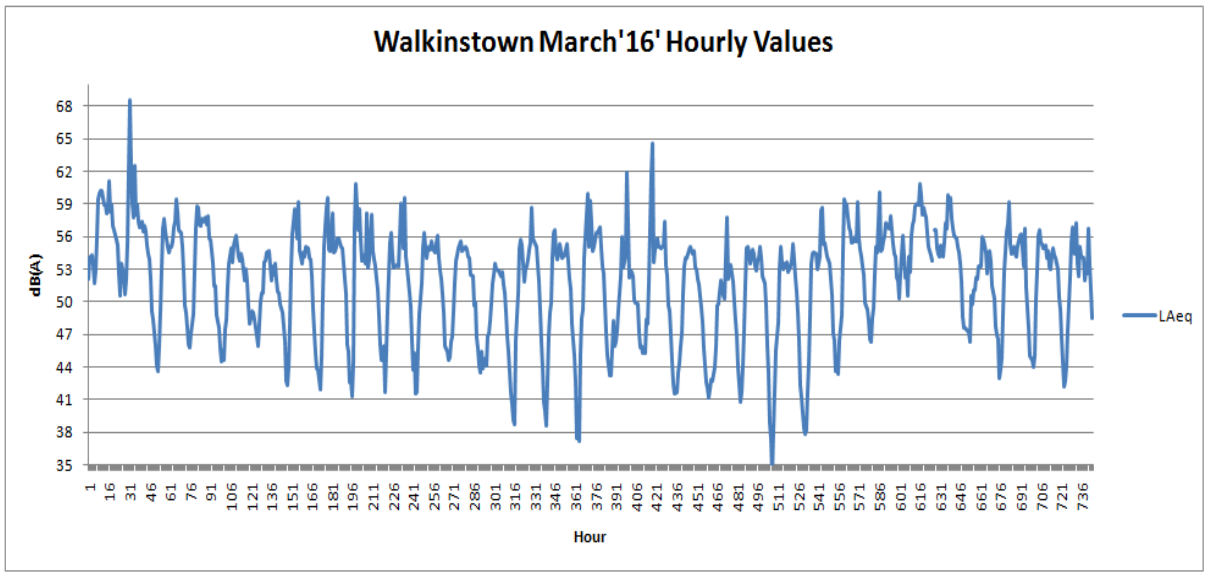
PERCY FRENCH ROAD

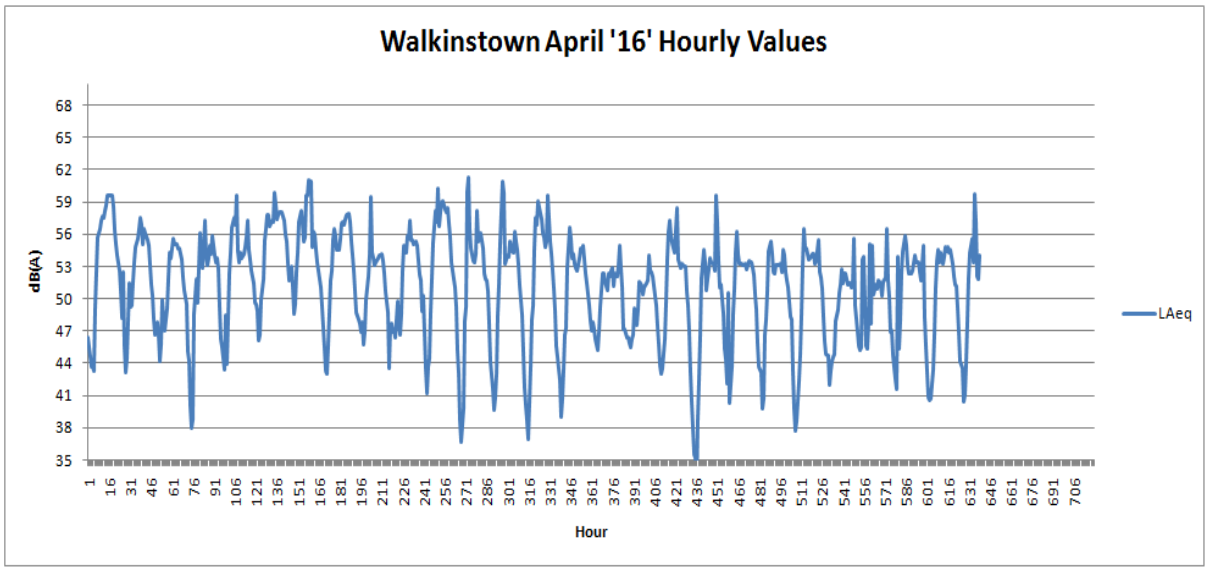
DUBLIN 12

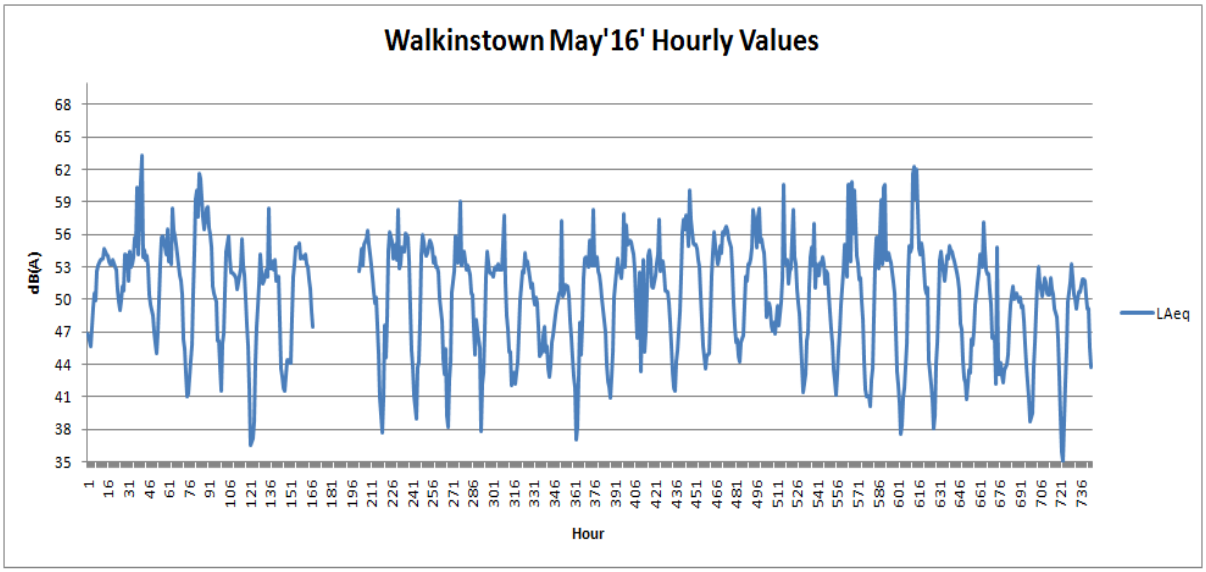

Walkinstown Hourly Values - 2016
dB(A)
Hour Number
Hourly Values
Median

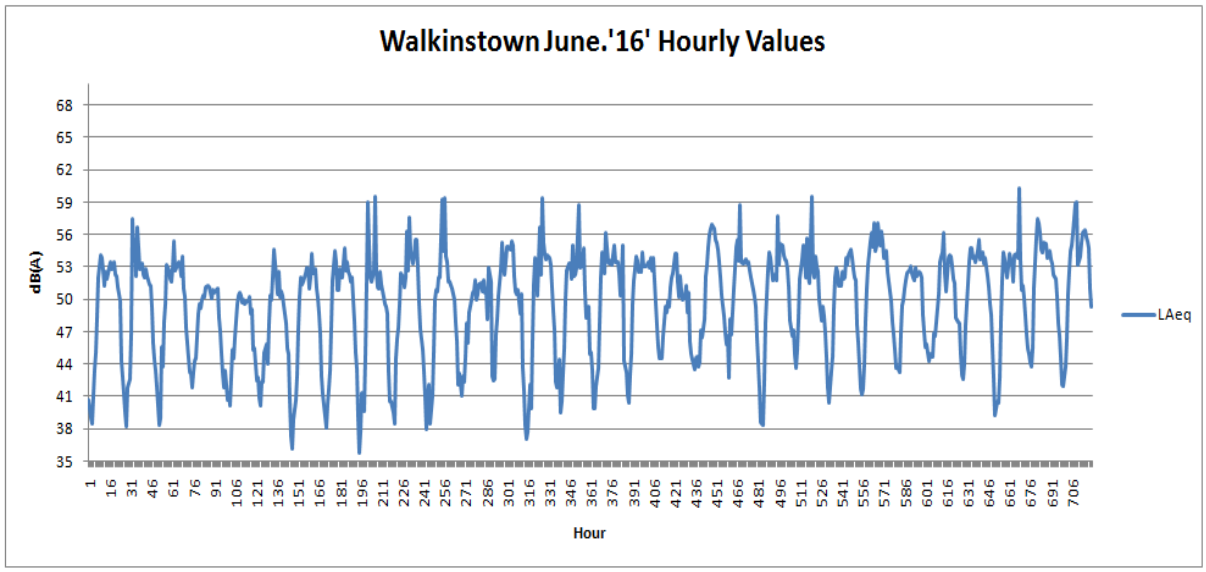

Walkinstown January'16' Hourly Values
dB(A)
Hour
LAeq

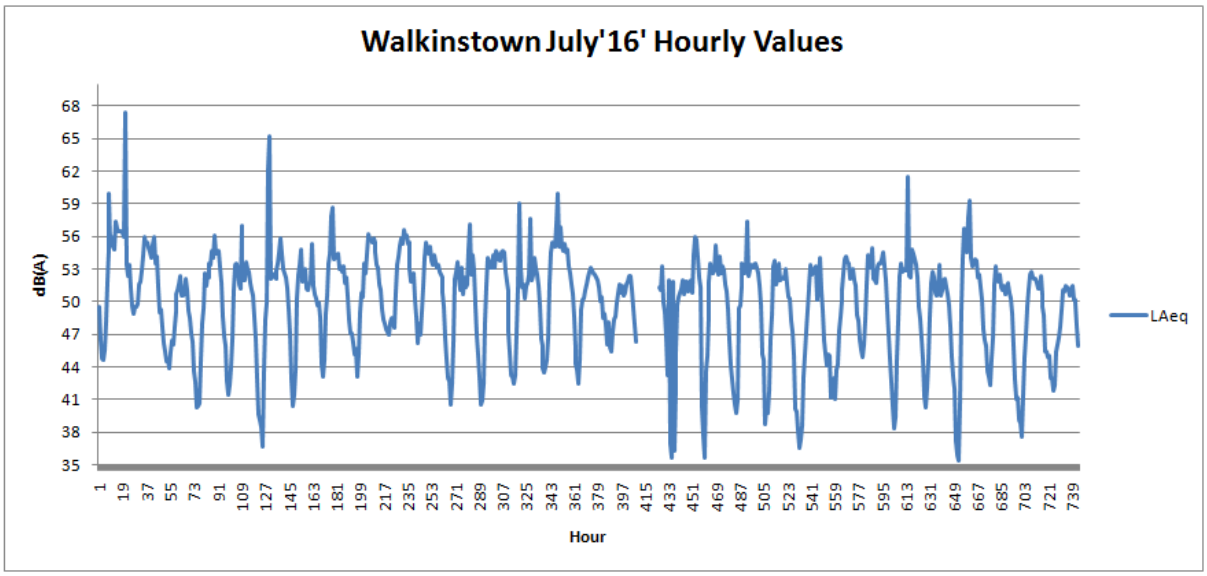

Walkinstown February'16' Hourly Values
dB(A)
Hour
LAeq

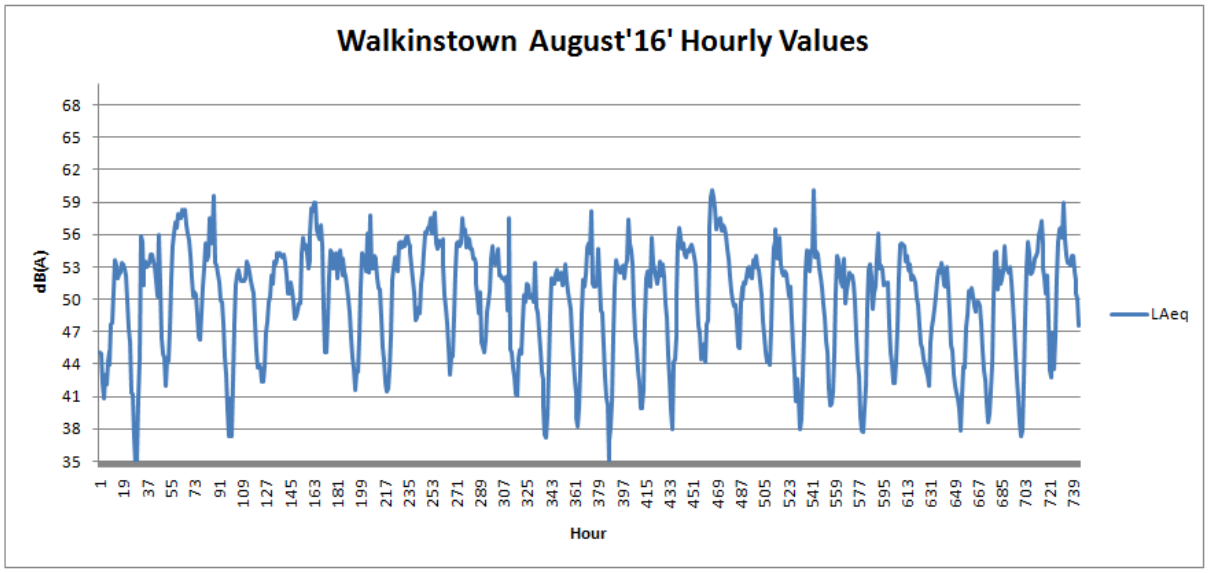

Walkinstown March'16' Hourly Values
dB(A)
Hour
LAeq

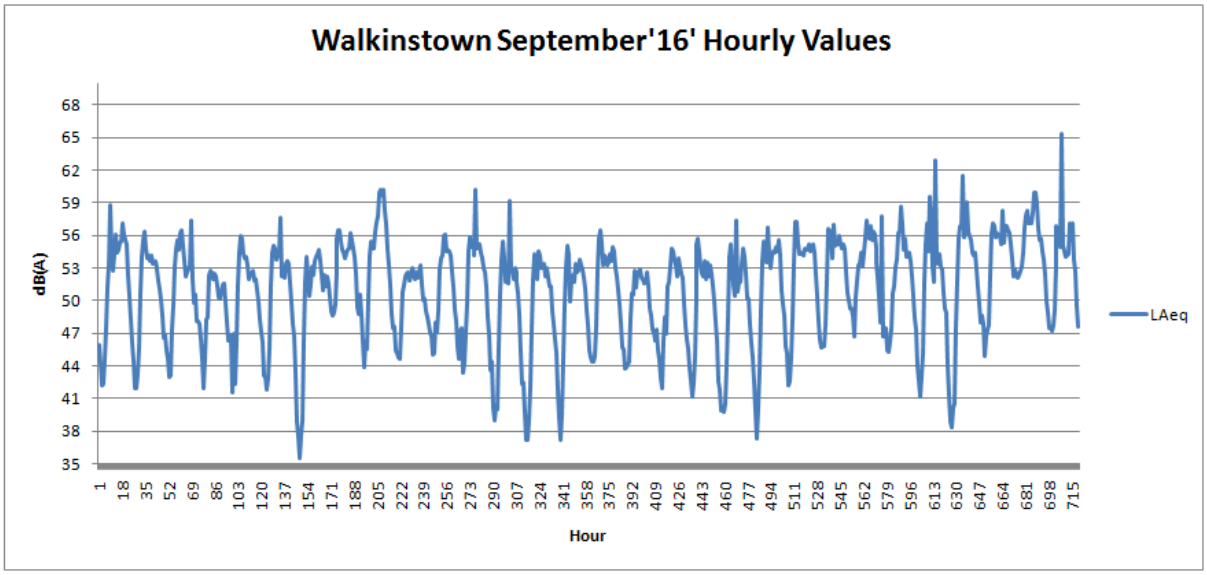

Walkinstown April '16' Hourly Values
dB(A)
Hour
LAeq

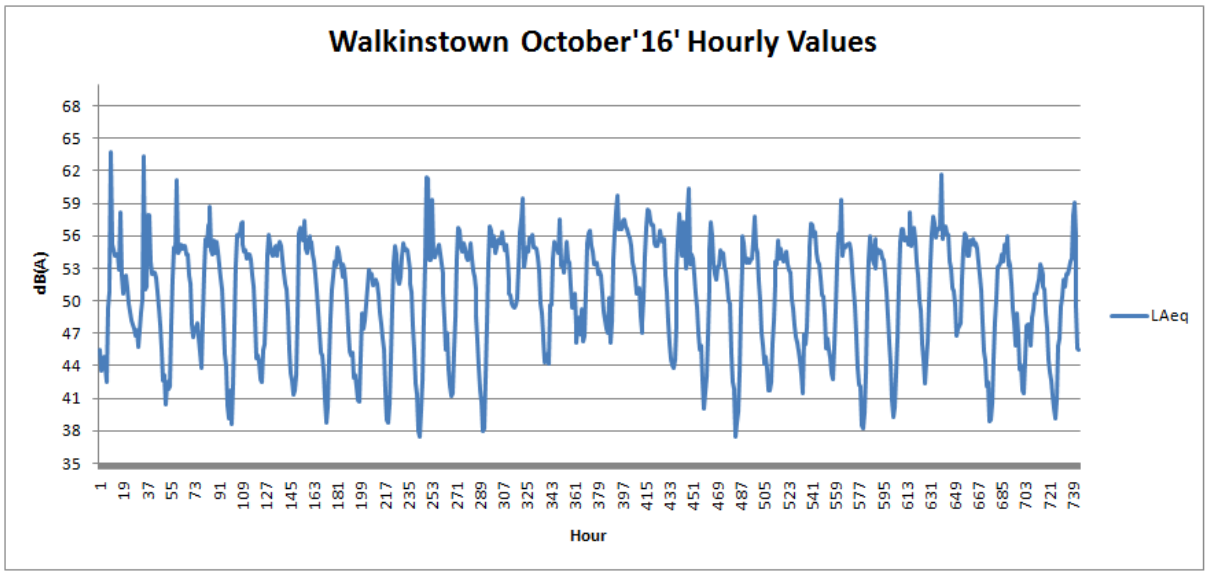

Walkinstown May'16' Hourly Values
dB(A)
Hour
LAeq

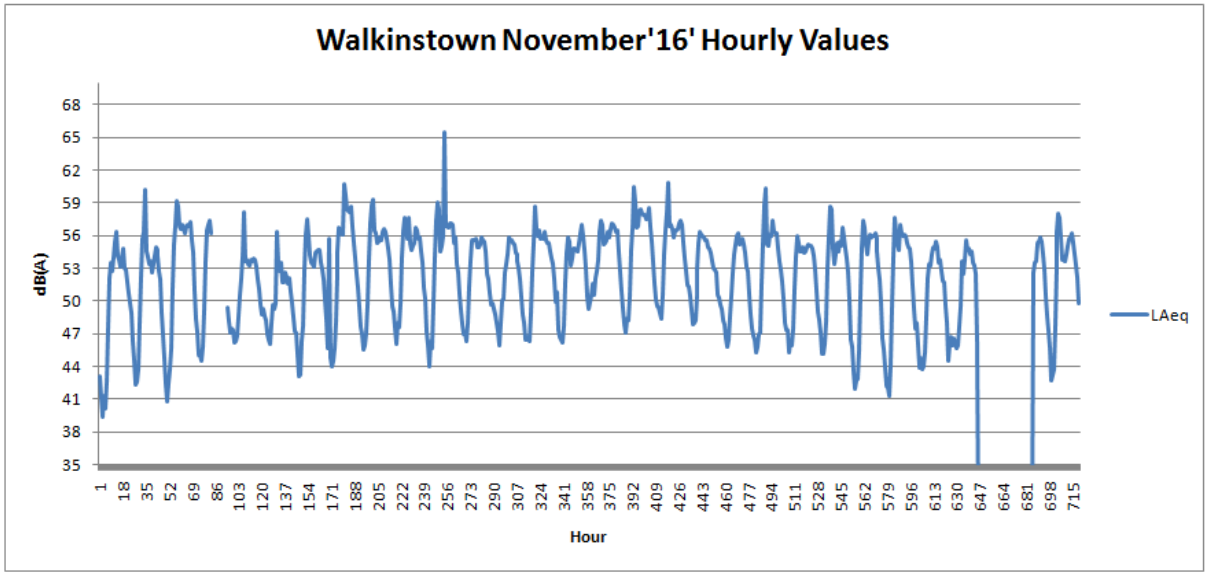

Walkinstown June.'16' Hourly Values
dB(A)
Hour
LAeq

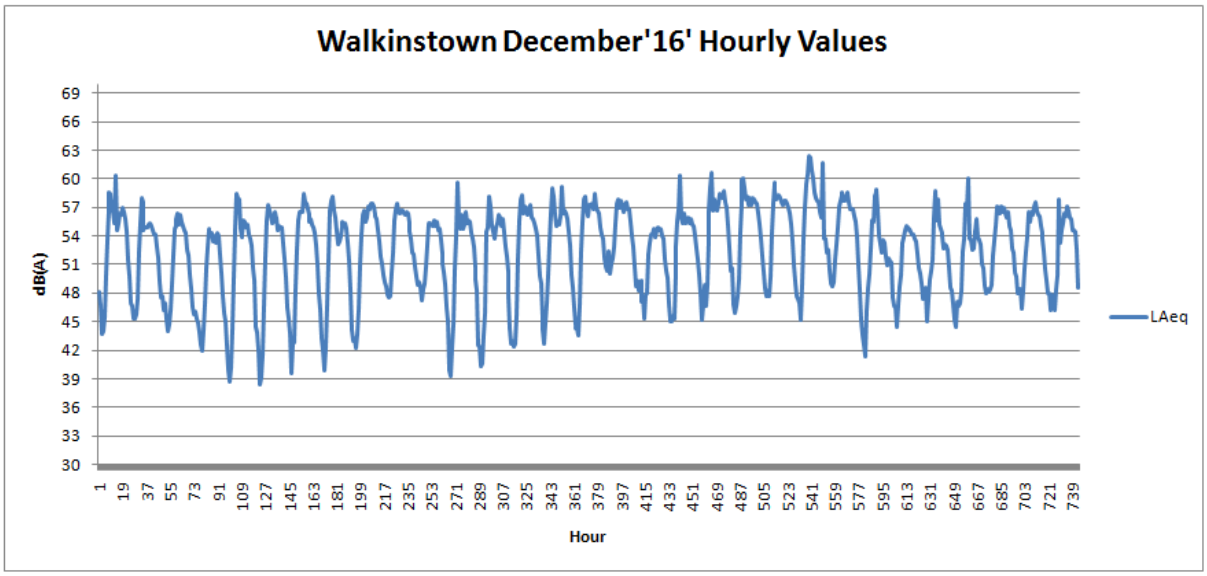

Walkinstown July'16' Hourly Values
dB(A)
Hour
LAeq


Walkinstown August'16' Hourly Values
dB(A)
Hour
LAeq


Walkinstown September'16' Hourly Values
dB(A)
Hour
LAeq


Walkinstown October'16' Hourly Values
dB(A)
Hour
LAeq

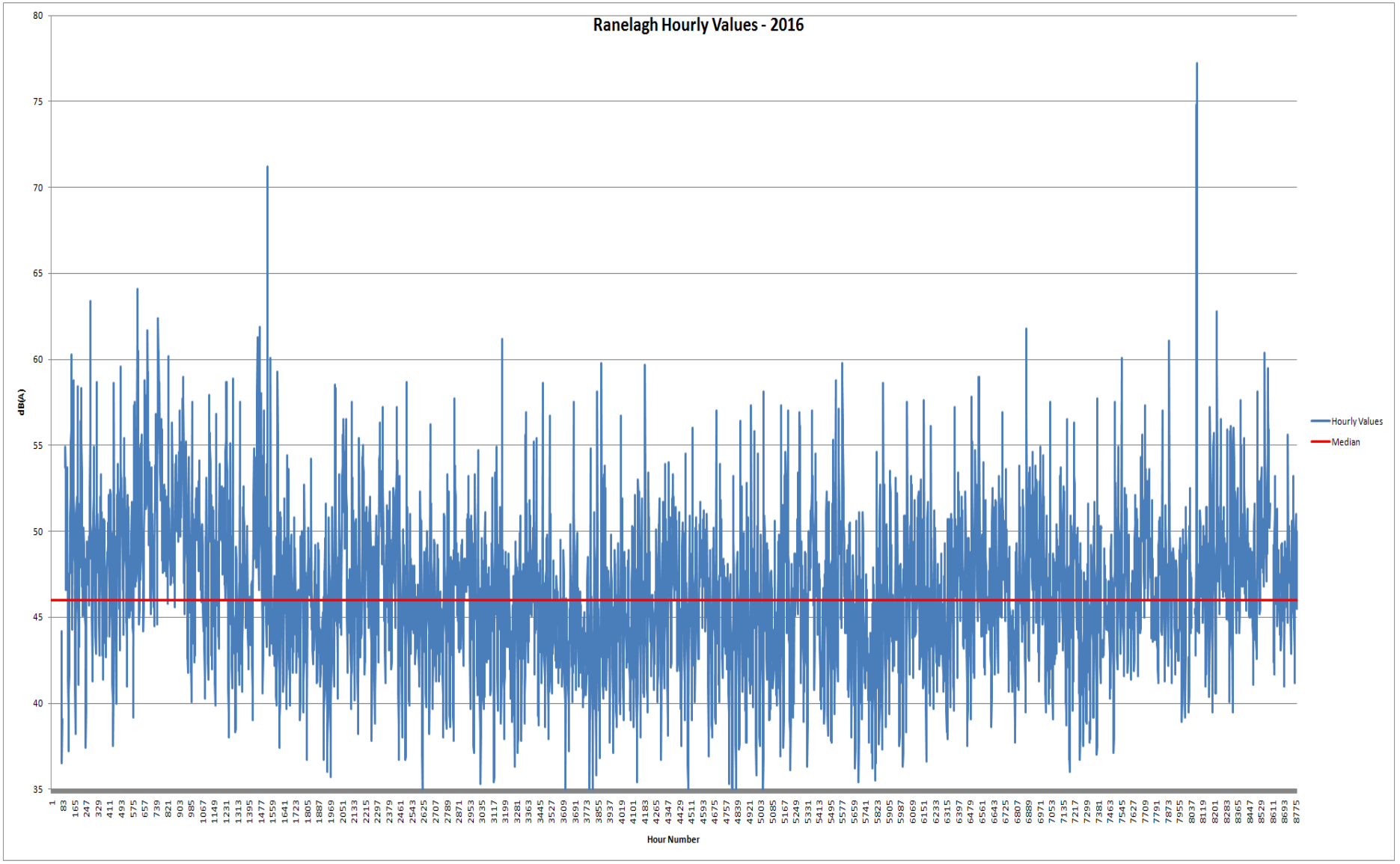

Walkinstown November'16' Hourly Values
dB(A)
Hour
LAeq

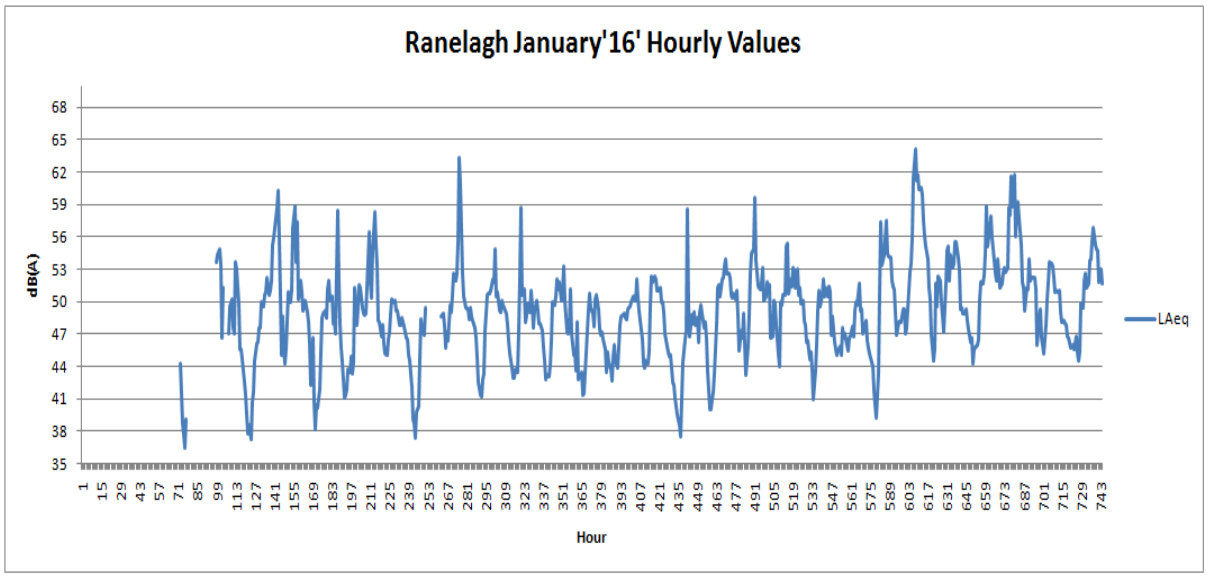

Walkinstown December'16' Hourly Values
dB(A)
Hour
LAeq

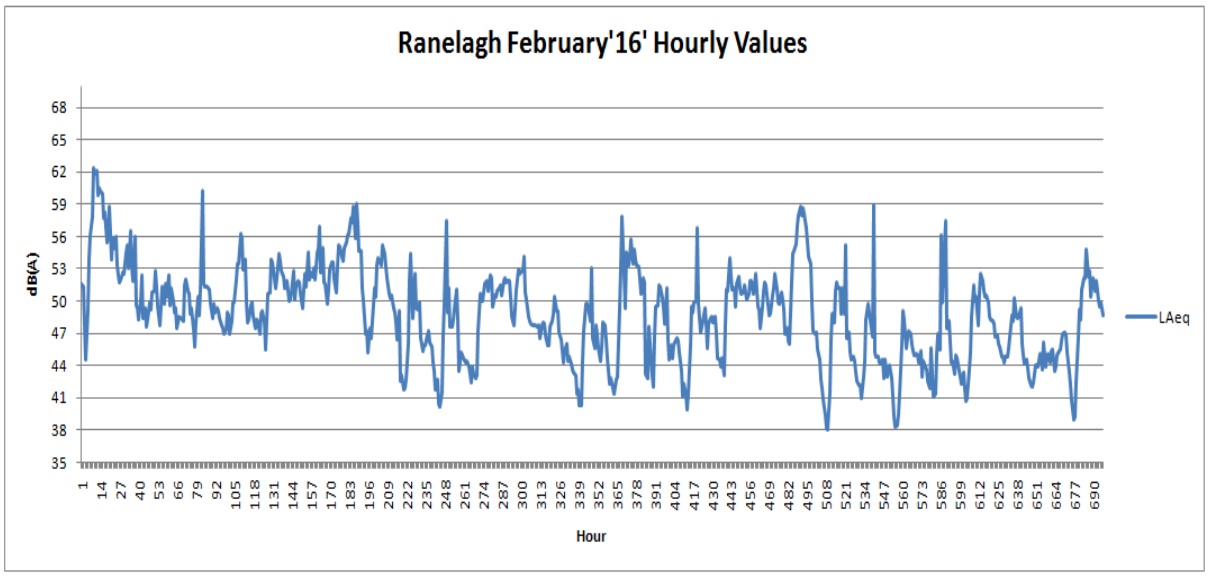
WOODSTOCK STOCK GARDENS

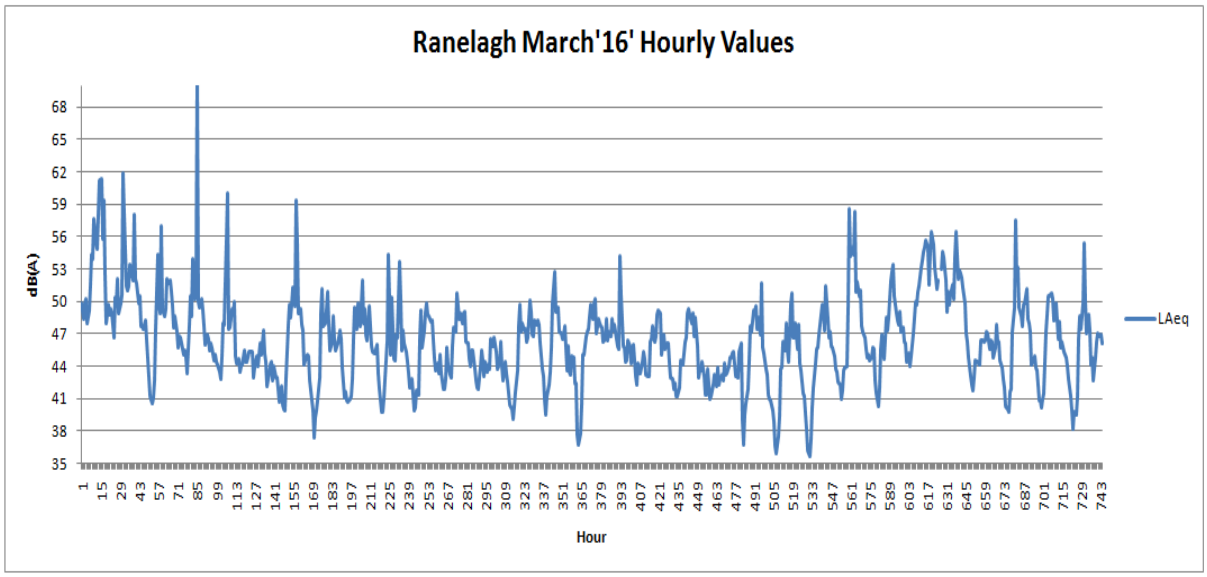
RANELAGH

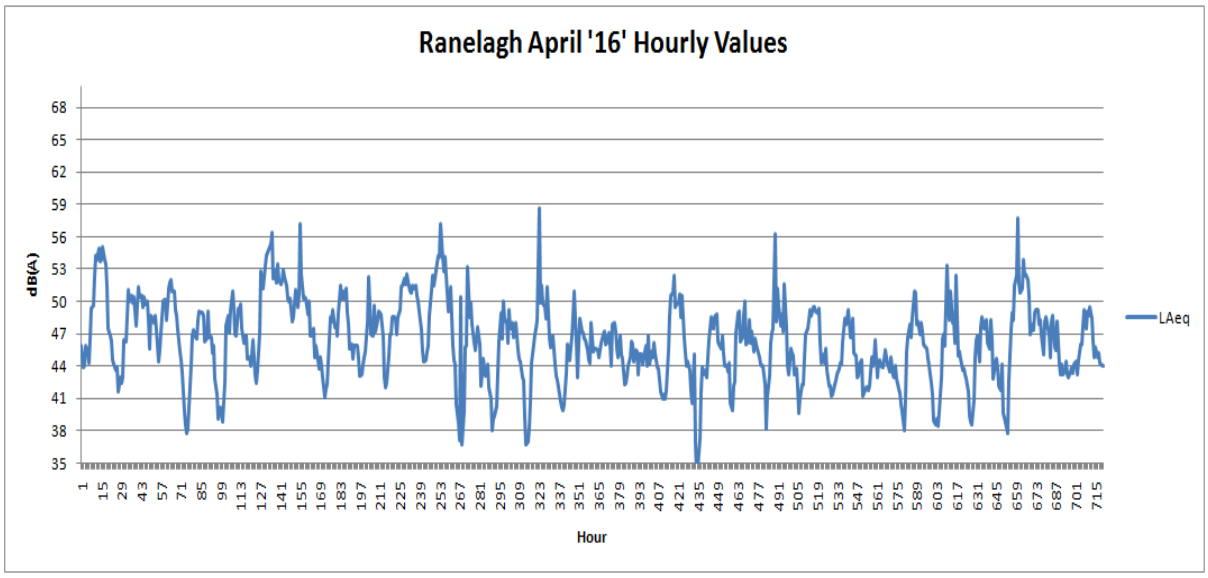
DUBLIN 6

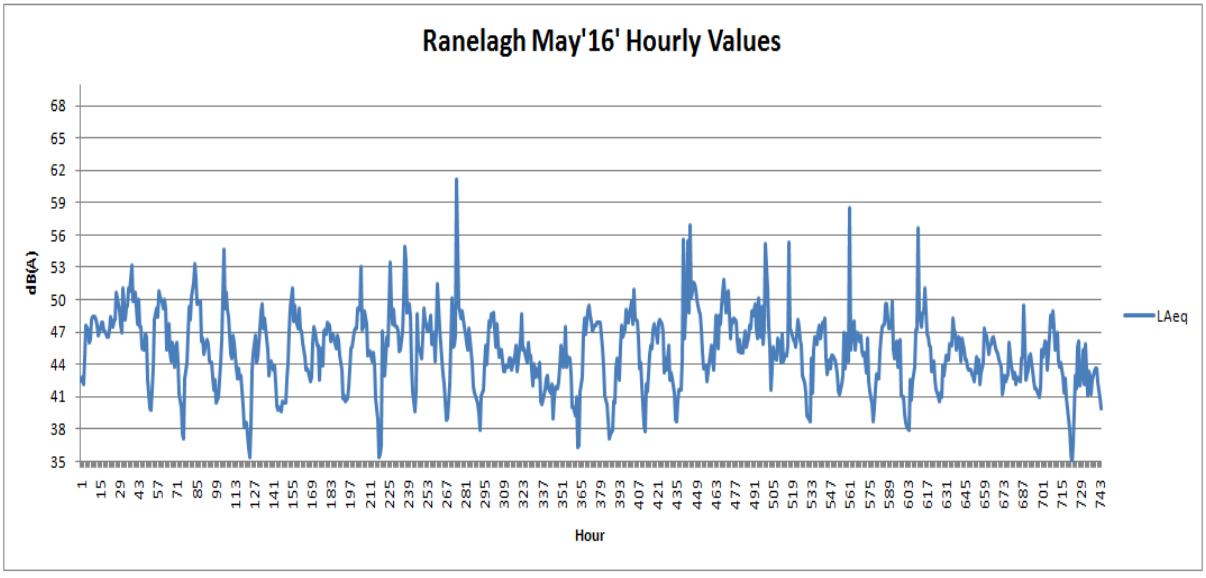

Ranelagh Hourly Values - 2016
dB(A)
Hour Number
Hourly Values
Median

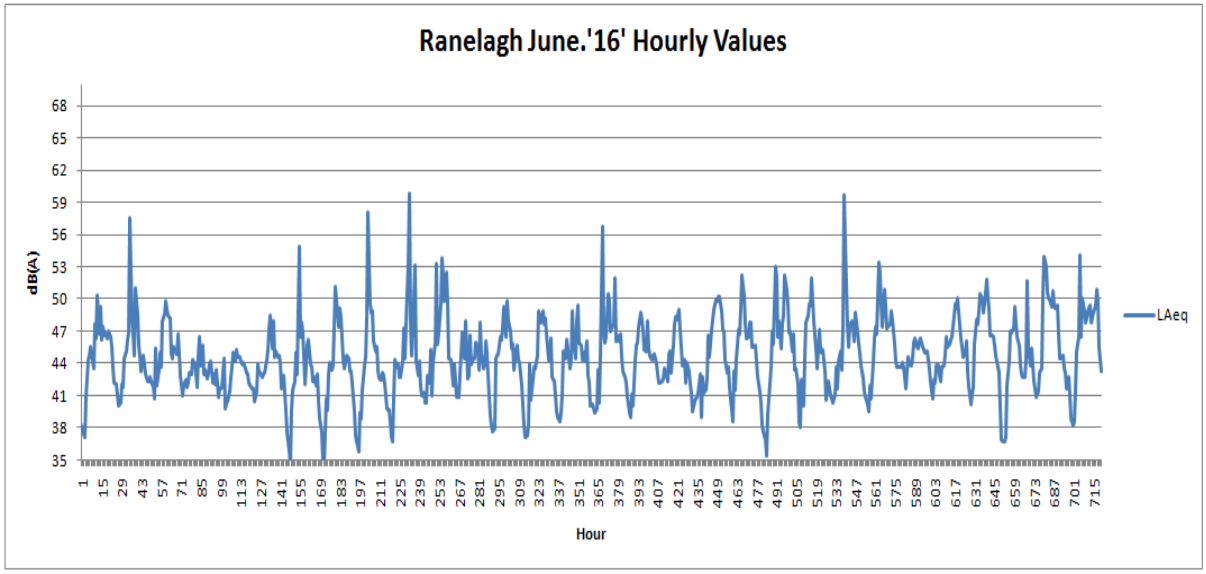

Ranelagh January'16' Hourly Values
dB(A)
Hour
LAeq

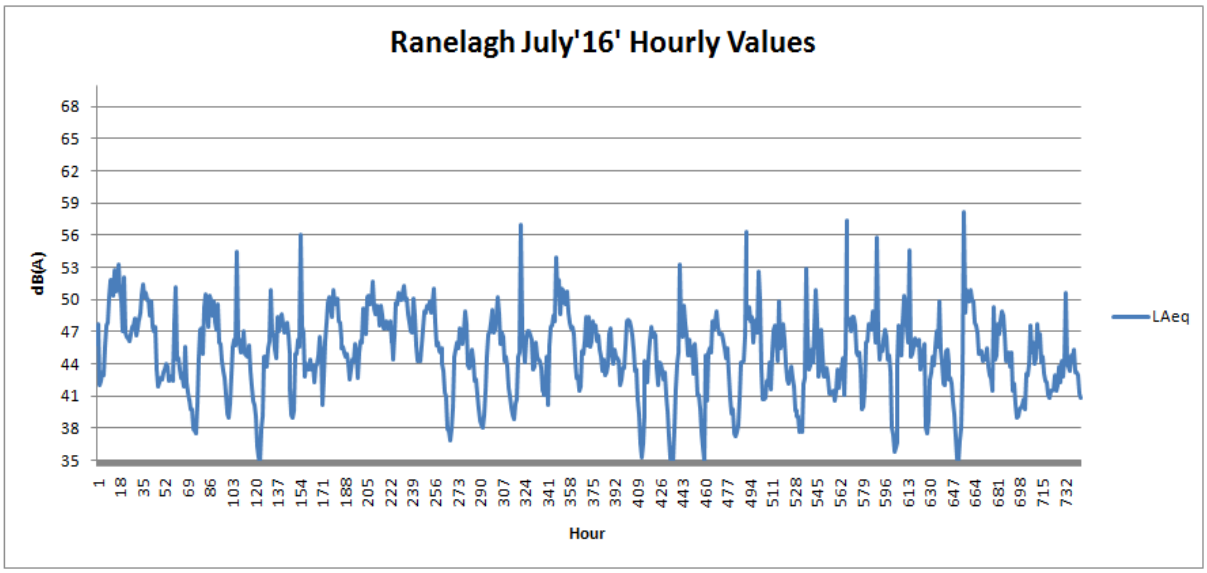

Ranelagh February'16' Hourly Values
dB(A)
Hour
LAeq

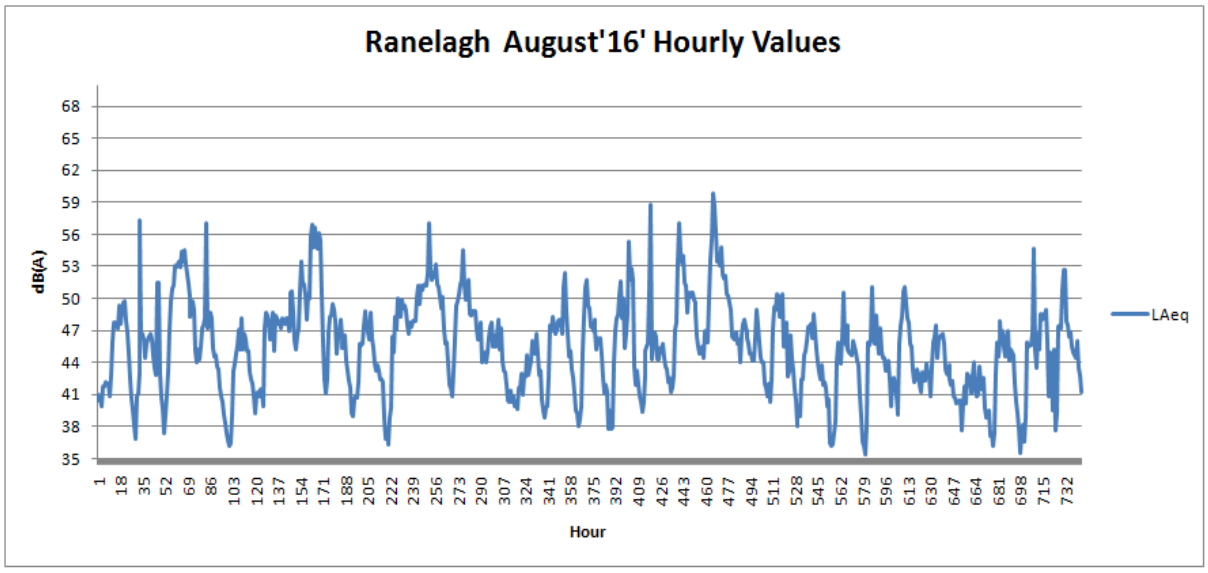

Ranelagh March'16' Hourly Values
dB(A)
Hour
LAeq

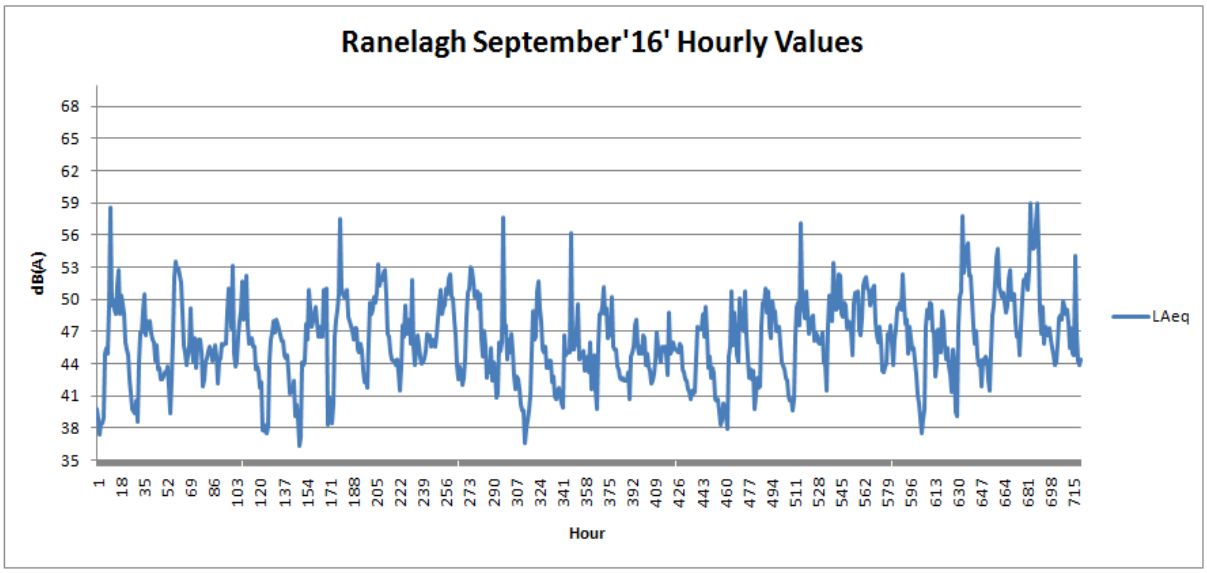

Ranelagh April '16' Hourly Values
dB(A)
Hour
LAeq

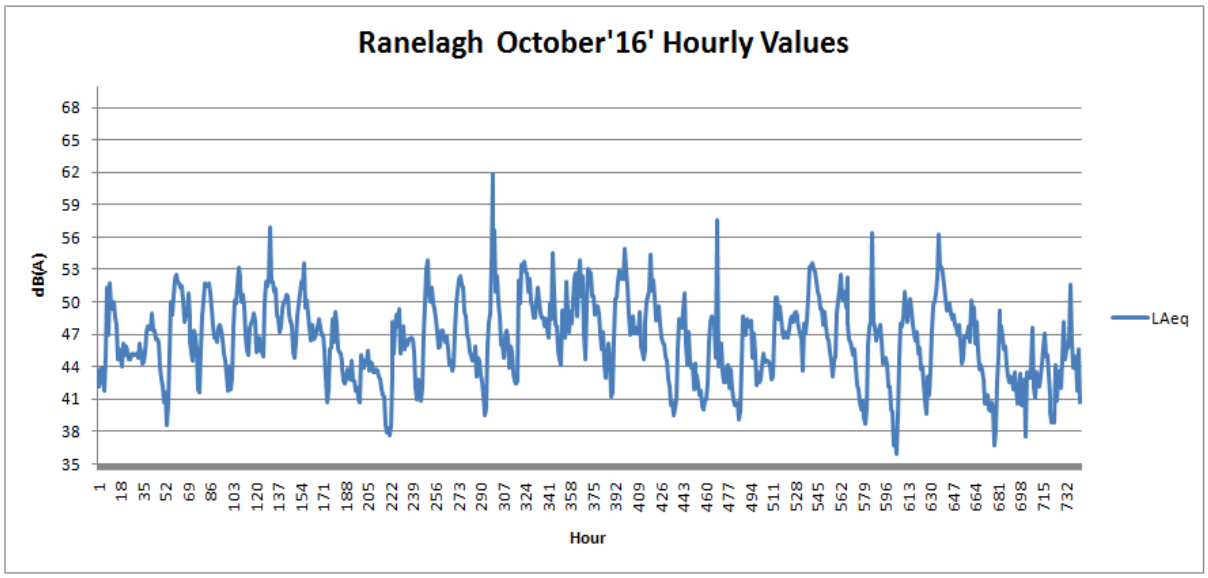

Ranelagh May'16' Hourly Values
dB(A)
Hour
LAeq

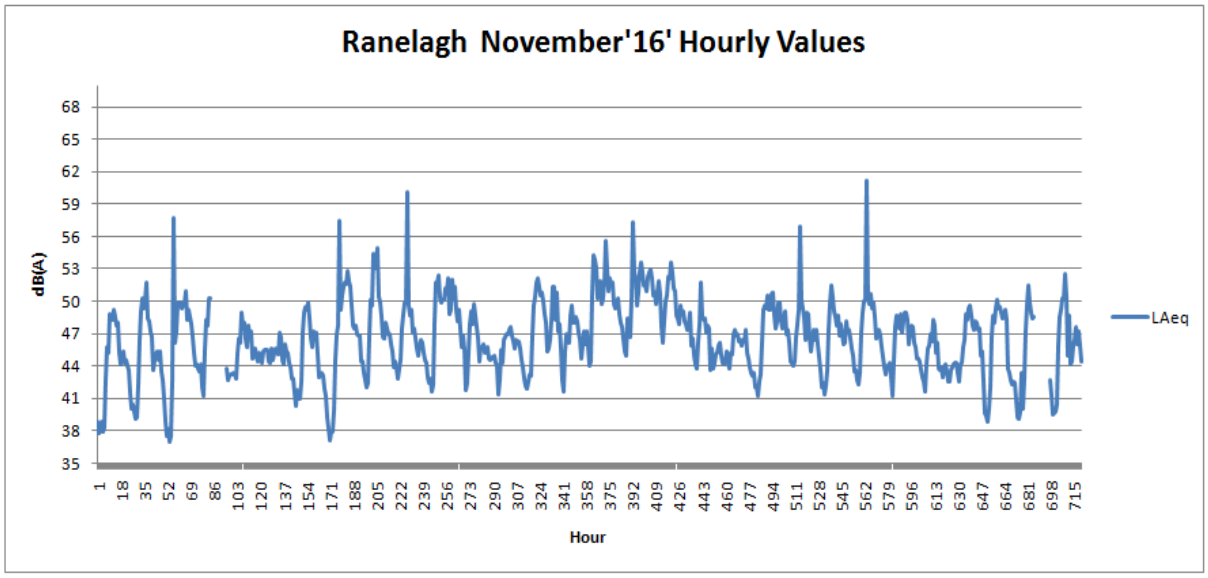

Ranelagh June.'16' Hourly Values
dB(A)
Hour
LAeq

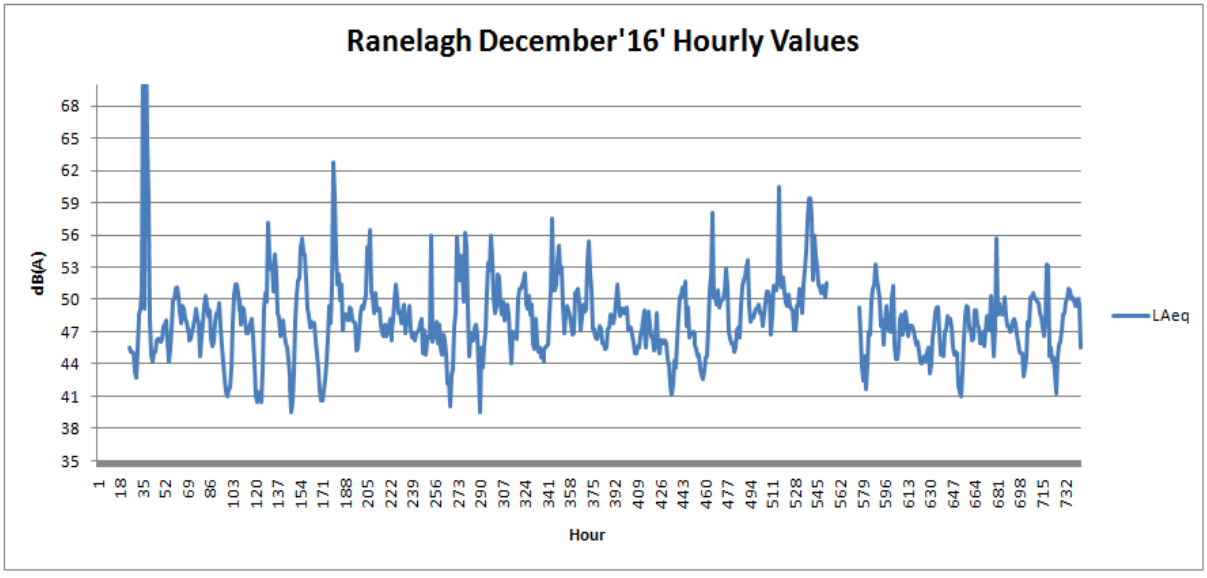

Ranelagh July'16' Hourly Values
dB(A)
Hour
LAeq


Ranelagh August'16' Hourly Values
dB(A)
Hour
LAeq


Ranelagh September'16' Hourly Values
dB(A)
Hour
LAeq


Ranelagh October'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681 698 715 732
Hour
LAeq

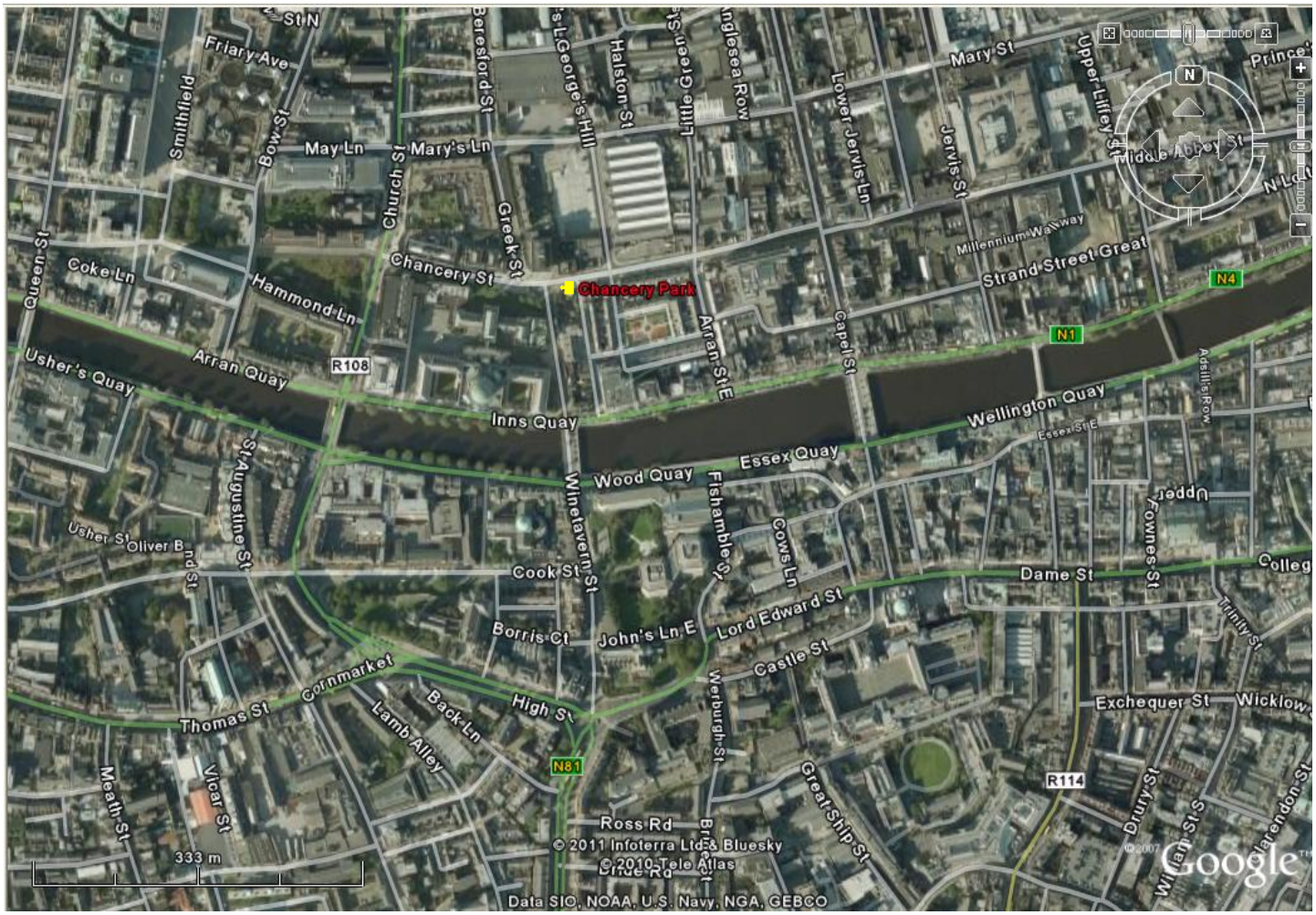

Ranelagh November'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681 698 715
Hour
LAeq

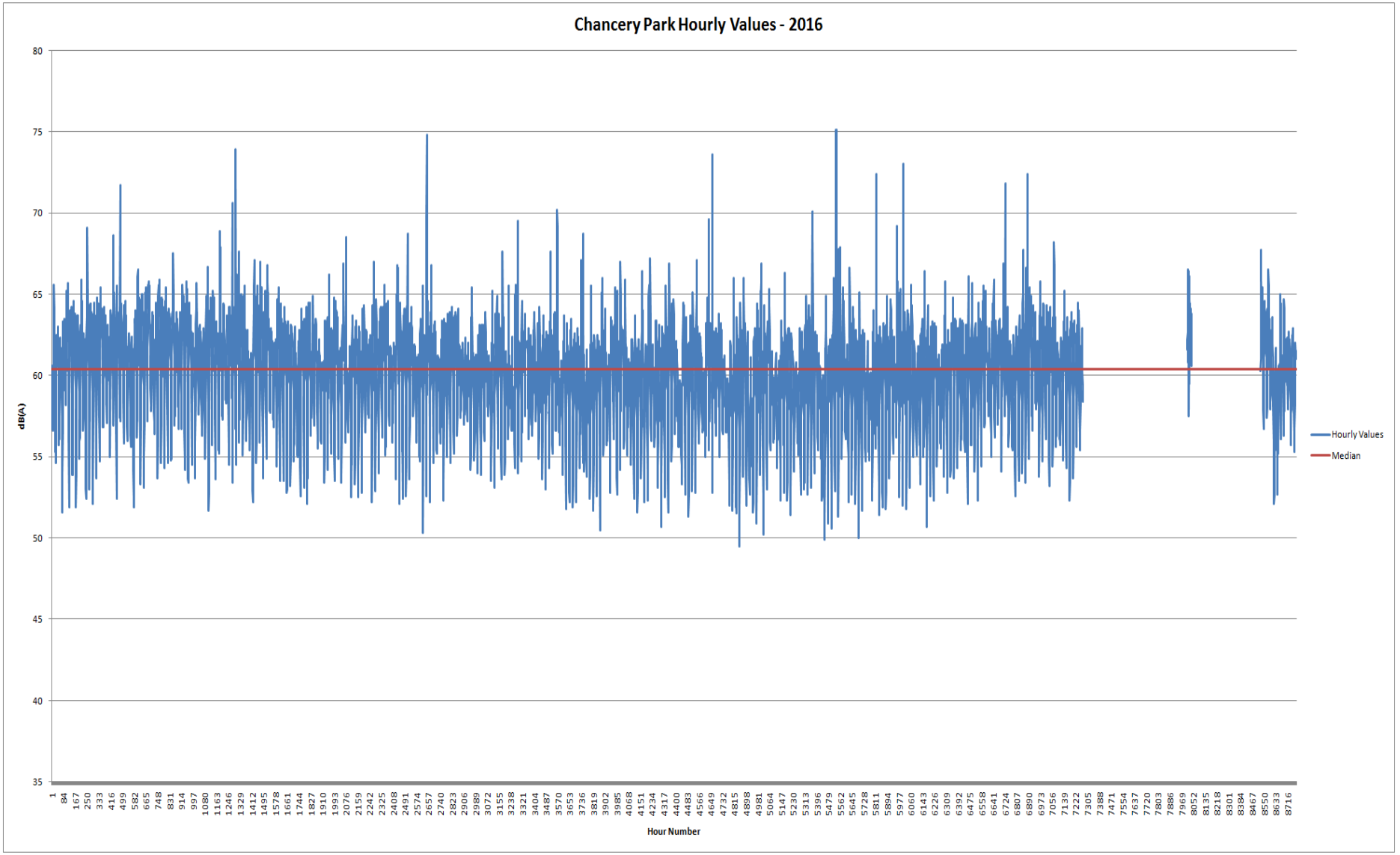

Ranelagh December'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 18 35 52 69 86 103 120 137 154 171 188 205 222 239 256 273 290 307 324 341 358 375 392 409 426 443 460 477 494 511 528 545 562 579 596 613 630 647 664 681 698 715 732
Hour
LAeq

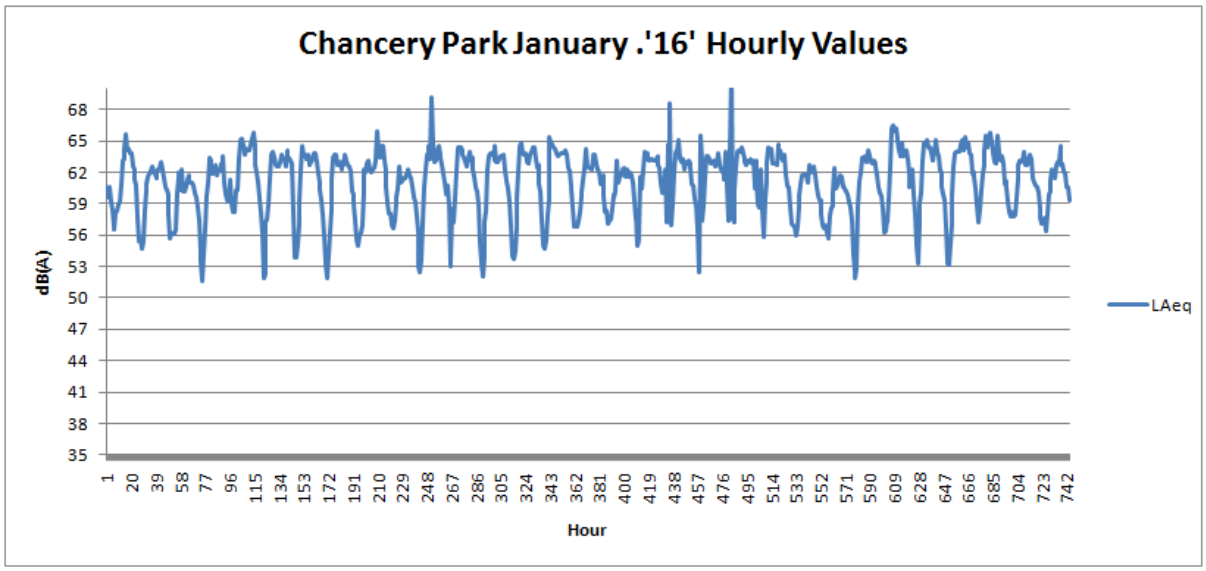
CHANCERY PARK

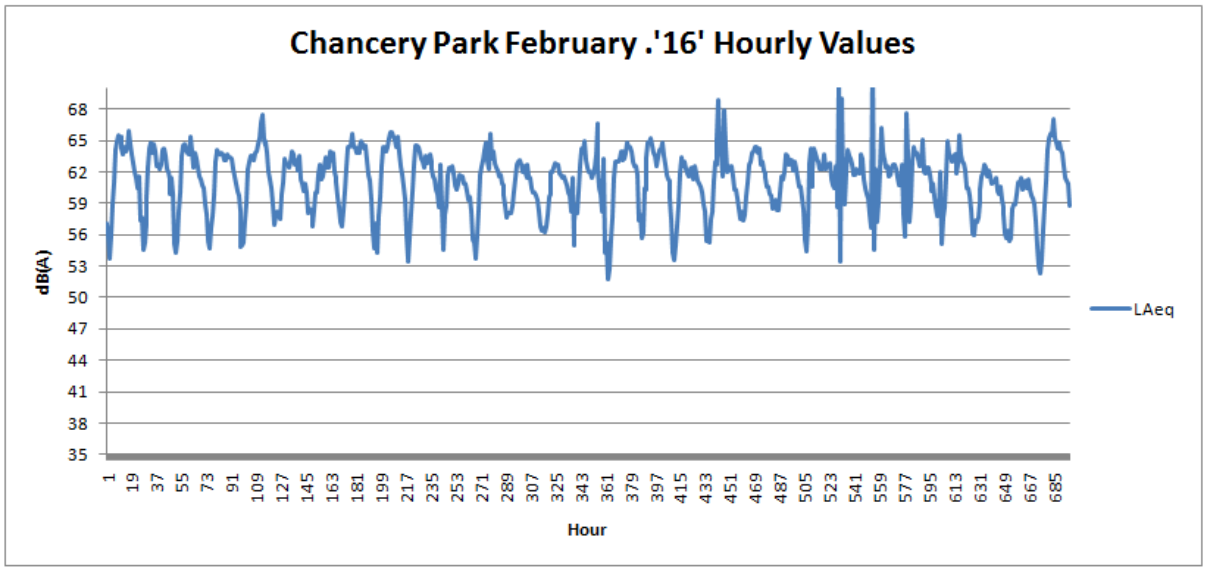
CHANCERY ST.

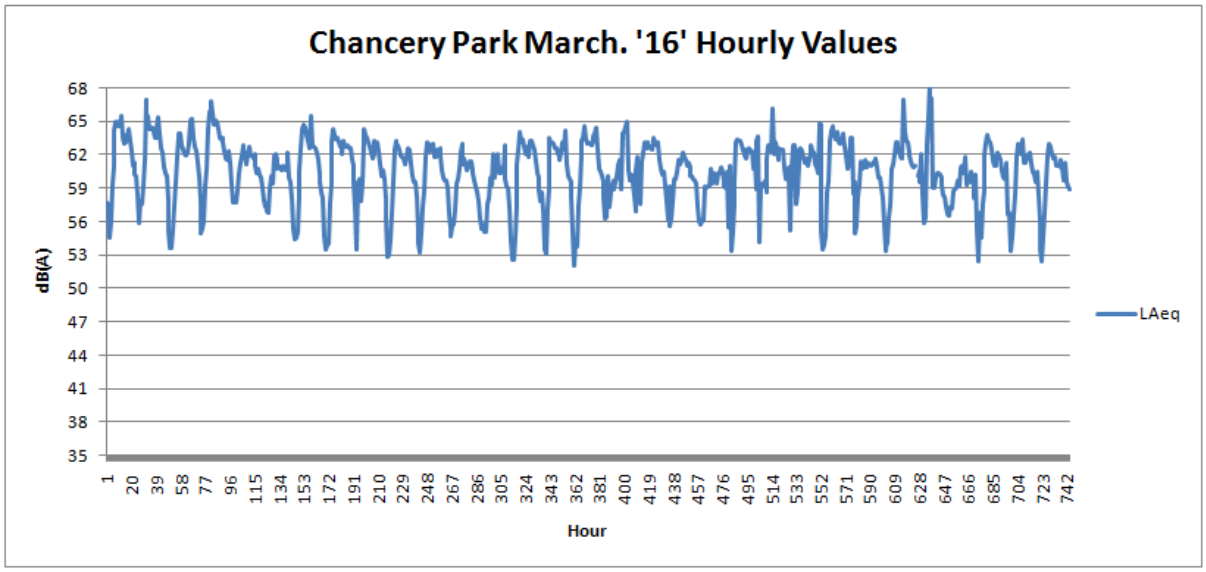
DUBLIN 1

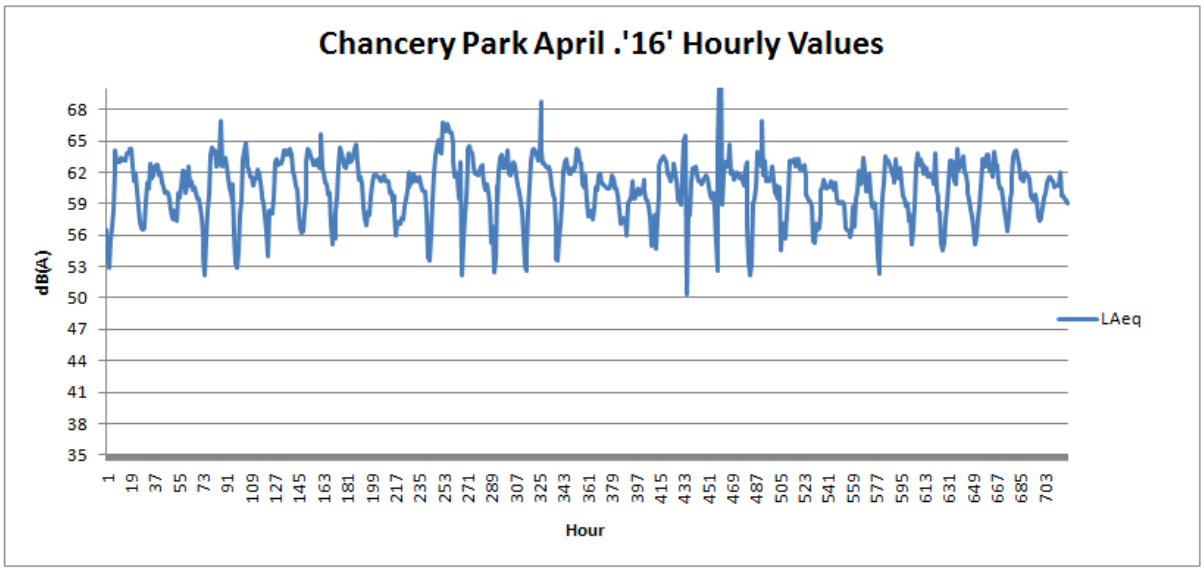


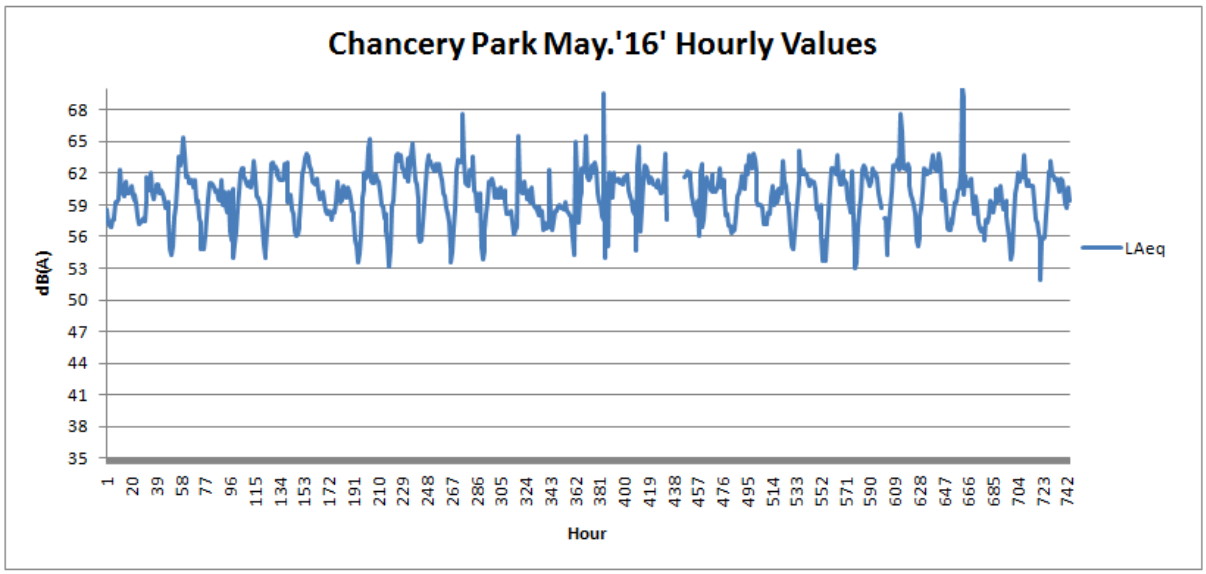

Chancery Park Hourly Values - 2016
dB(A)
80
75
70
65
60
55
50
45
40
35
Hour Number
1
84
167
250
333
416
499
582
665
748
831
914
997
1080
1163
1246
1329
1412
1495
1578
1661
1744
1827
1910
1993
2076
2159
2242
2325
2408
2491
2574
2657
2740
2823
2906
2989
3072
3155
3238
3321
3404
3487
3570
3653
3736
3819
3902
3985
4068
4151
4234
4317
4400
4483
4566
4649
4732
4815
4898
4981
5064
5147
5230
5313
5396
5479
5562
5645
5728
5811
5894
5977
6060
6143
6226
6309
6392
6475
6558
6641
6724
6807
6890
6973
7056
7139
7222
7305
7388
7471
7554
7637
7720
7803
7886
7969
8052
8135
8218
8301
8384
8467
8550
8633
8716
Hourly Values
Median

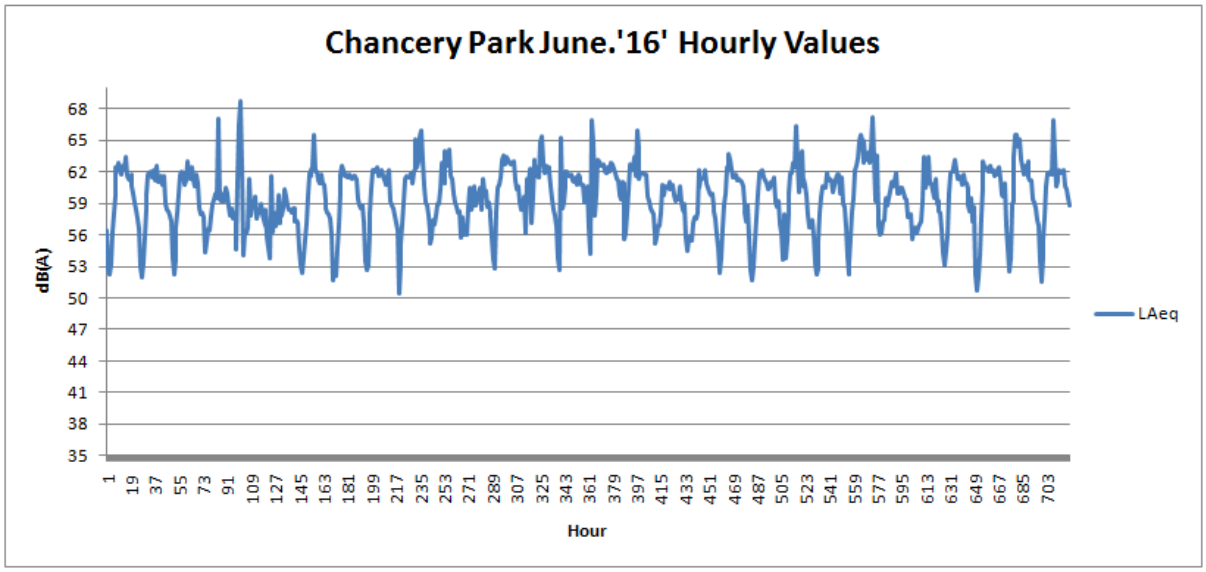

Chancery Park January .'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

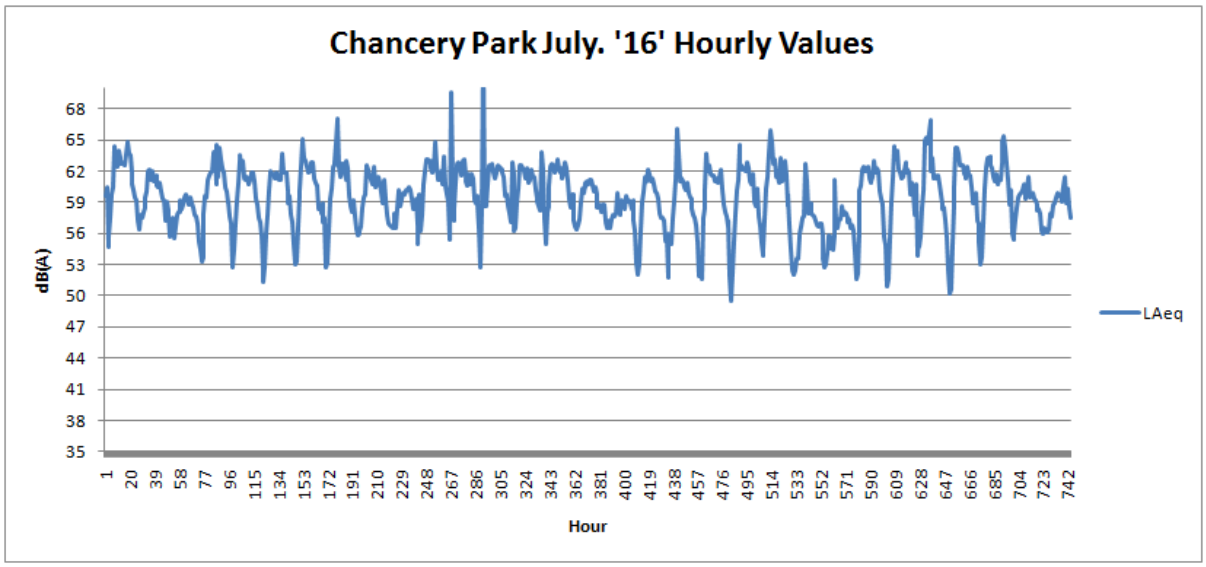

Chancery Park February .'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685
Hour
LAeq

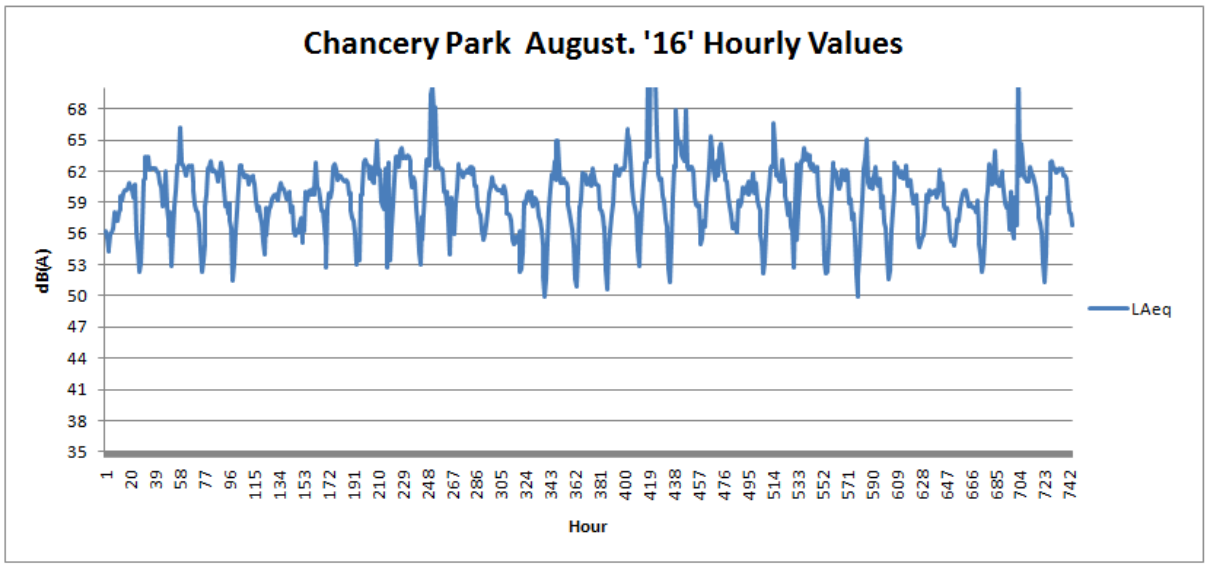

Chancery Park March. '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

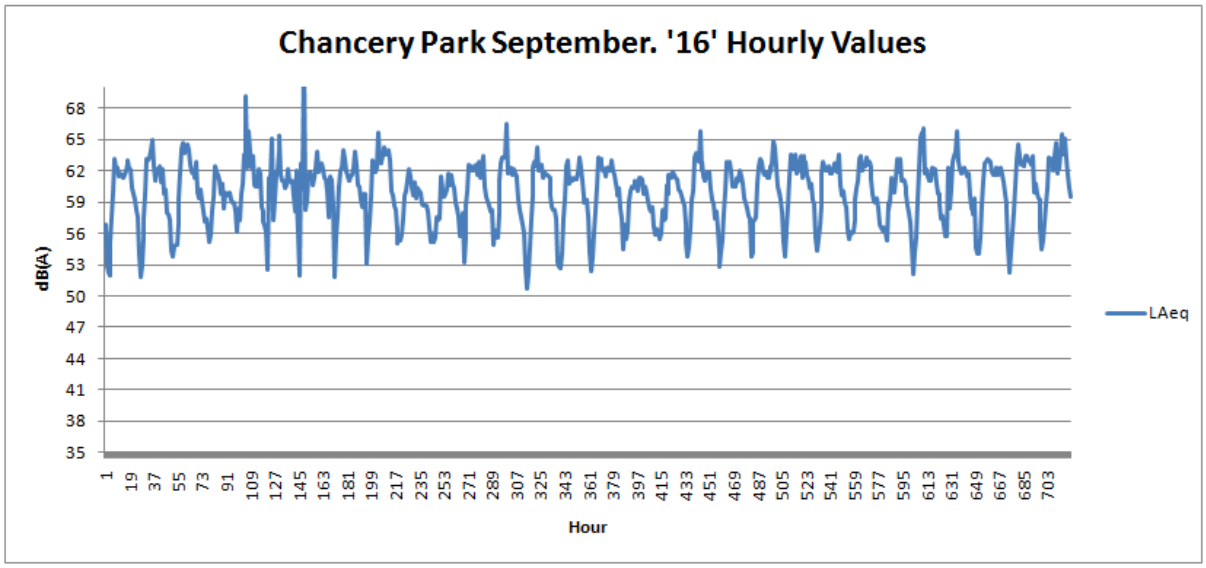

Chancery Park April .'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

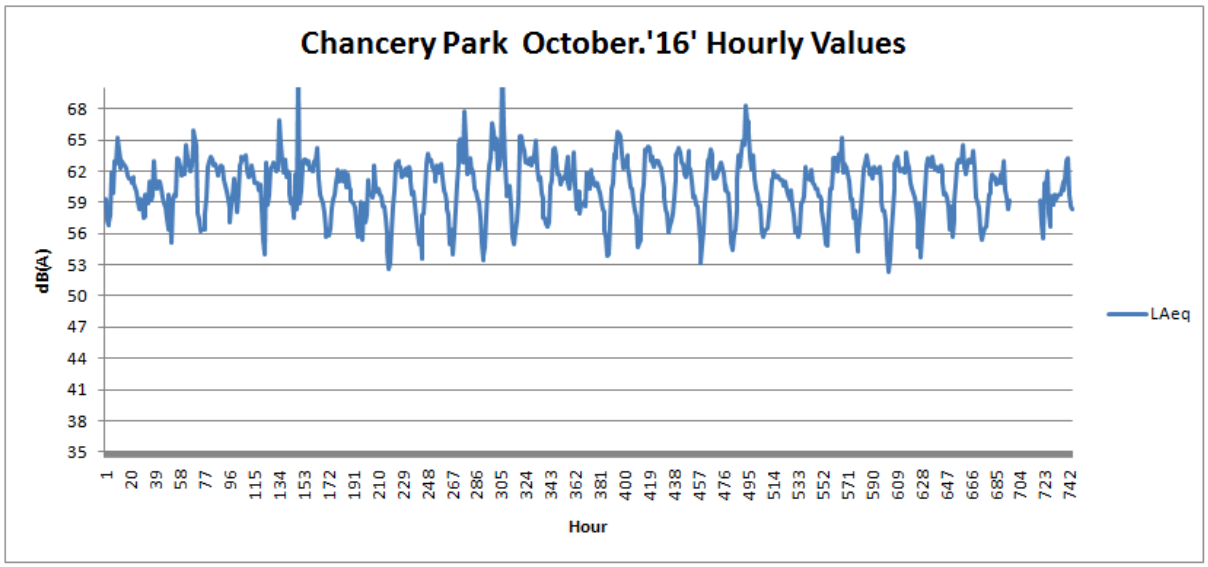

Chancery Park May.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

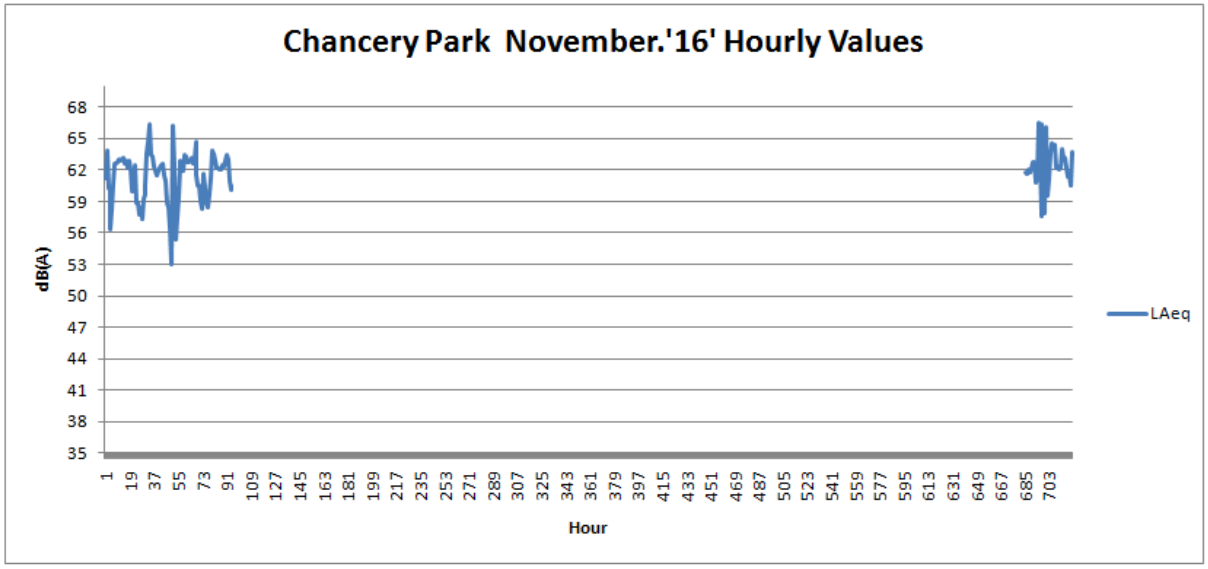

Chancery Park June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

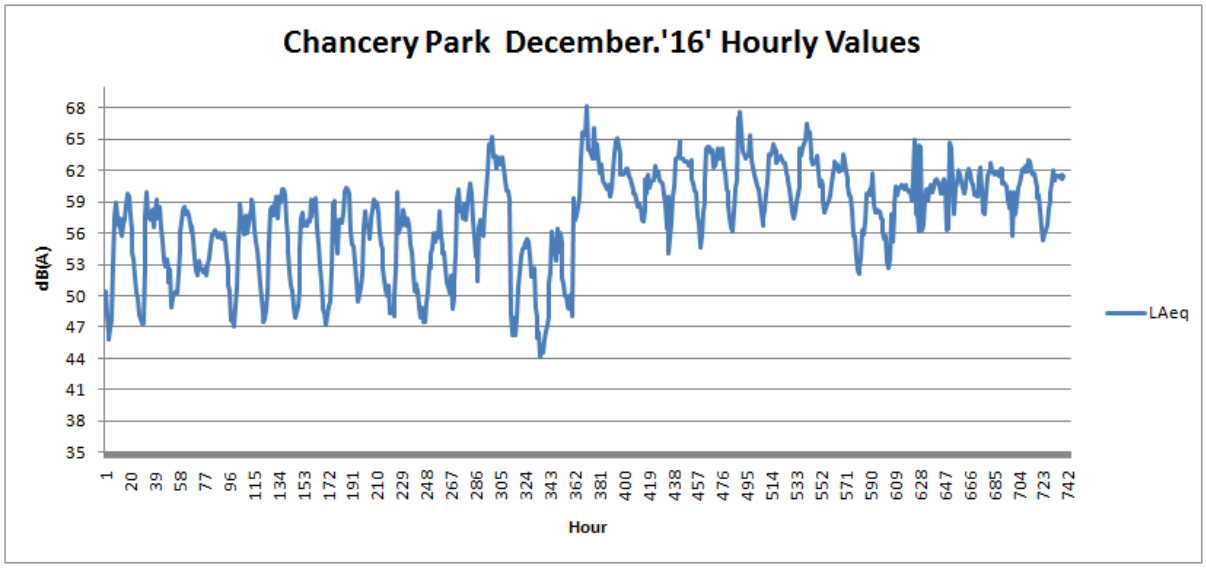

Chancery Park July. '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq


Chancery Park August. '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq


Chancery Park September. '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq


Chancery Park October.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

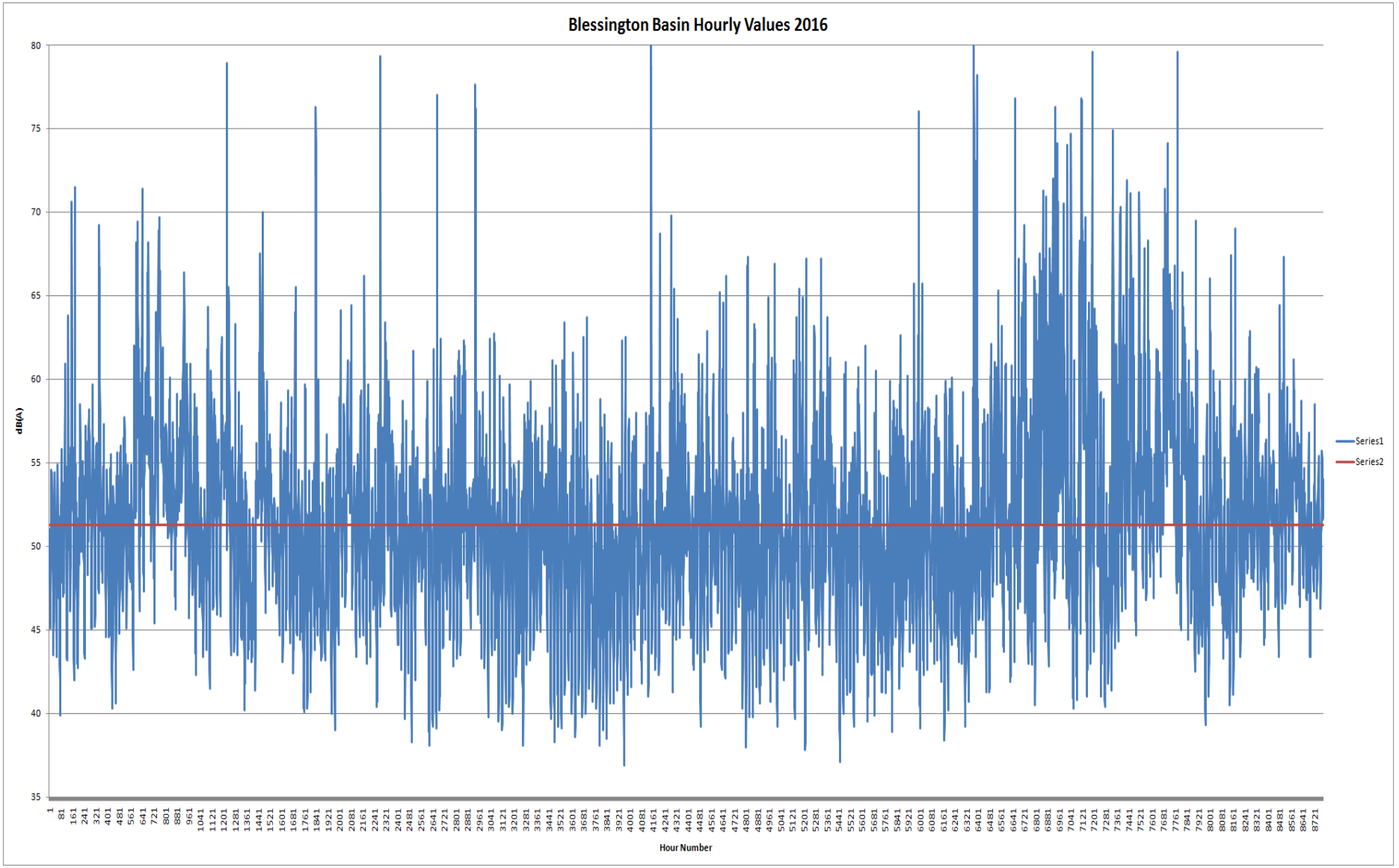

Chancery Park November.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

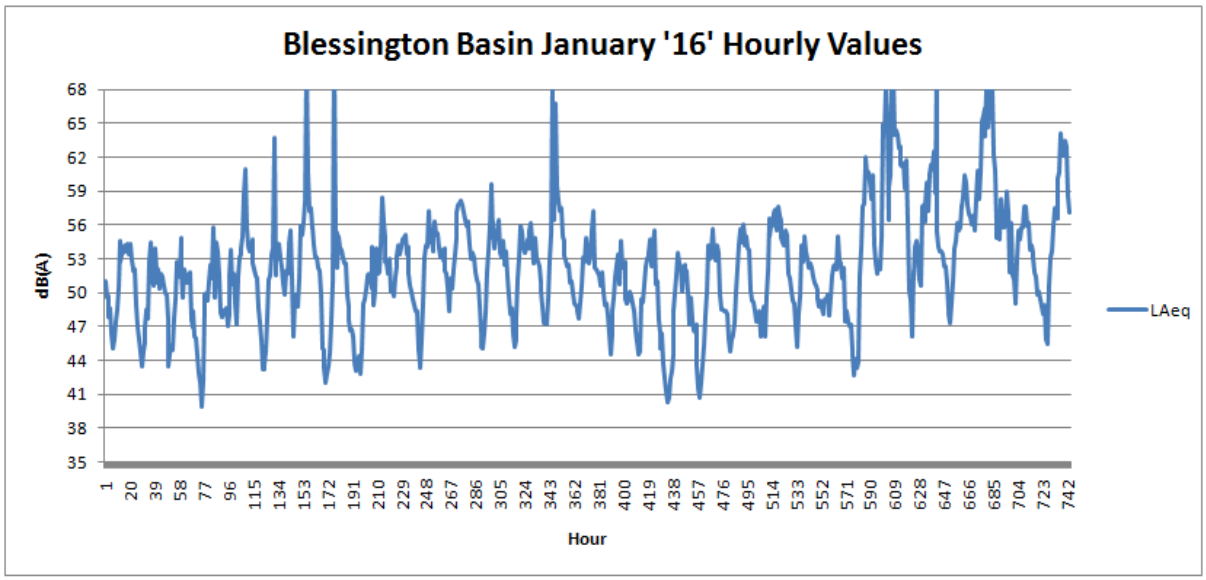

Chancery Park December.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

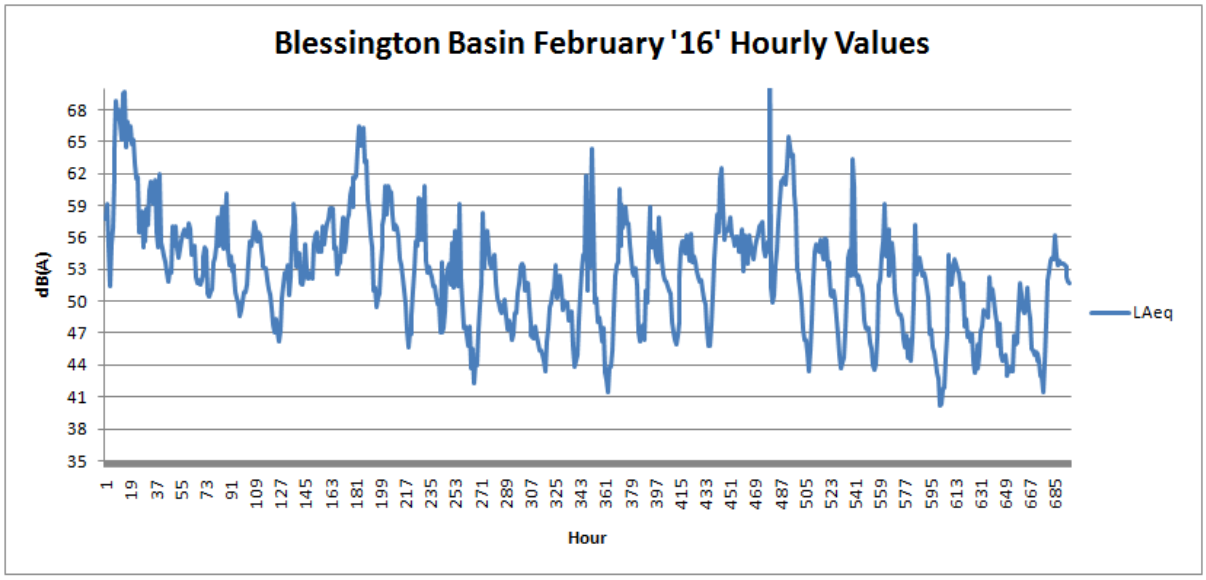
Blessington Basin

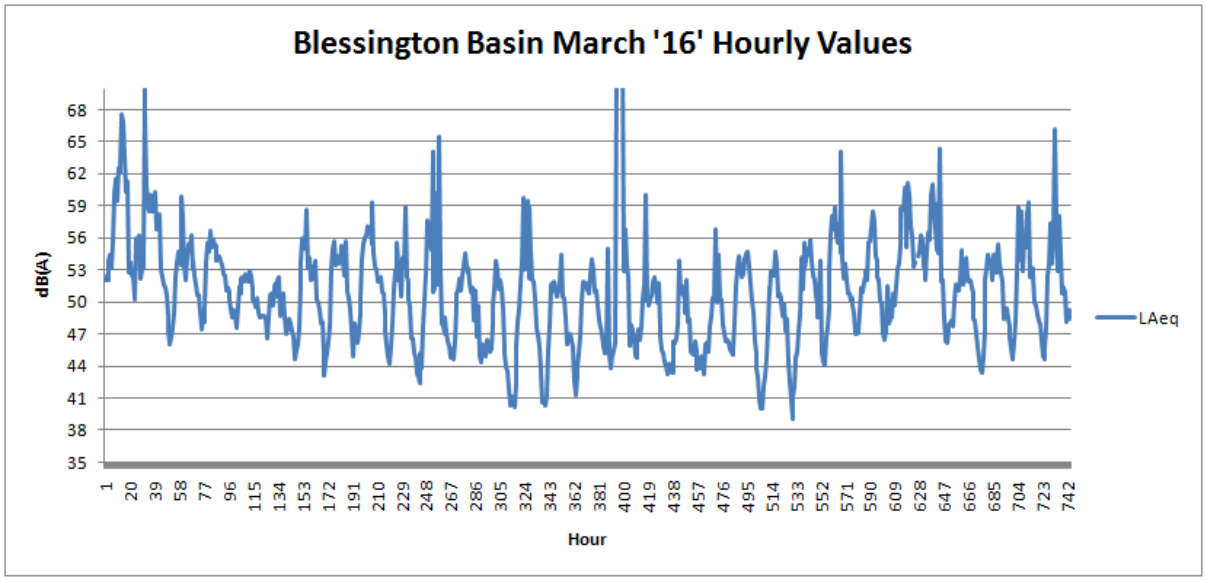
Blessington St.

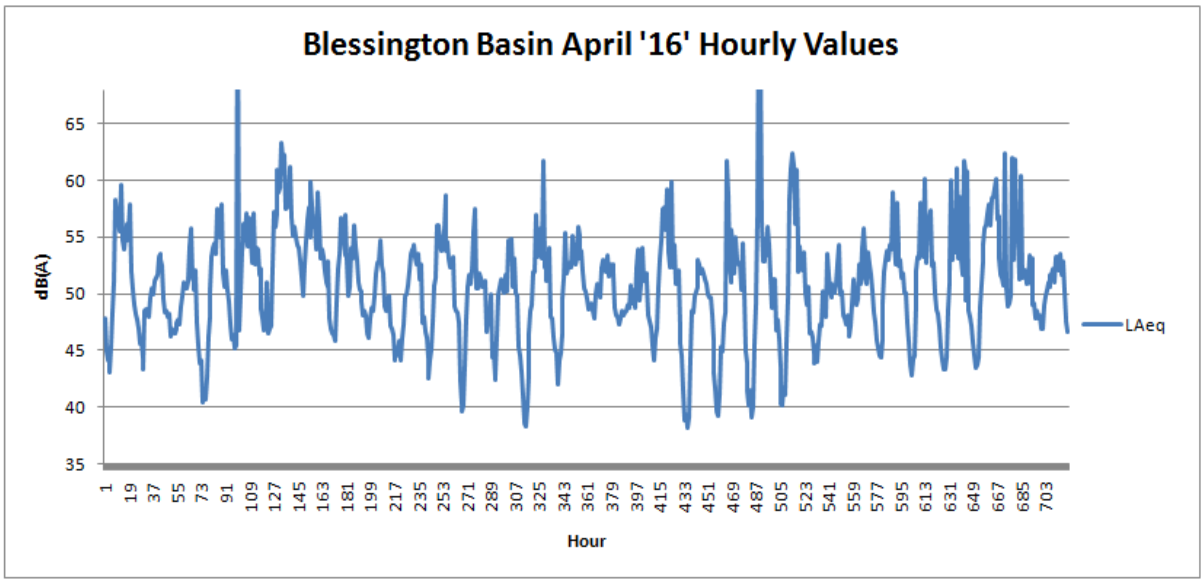
DUBLIN 1

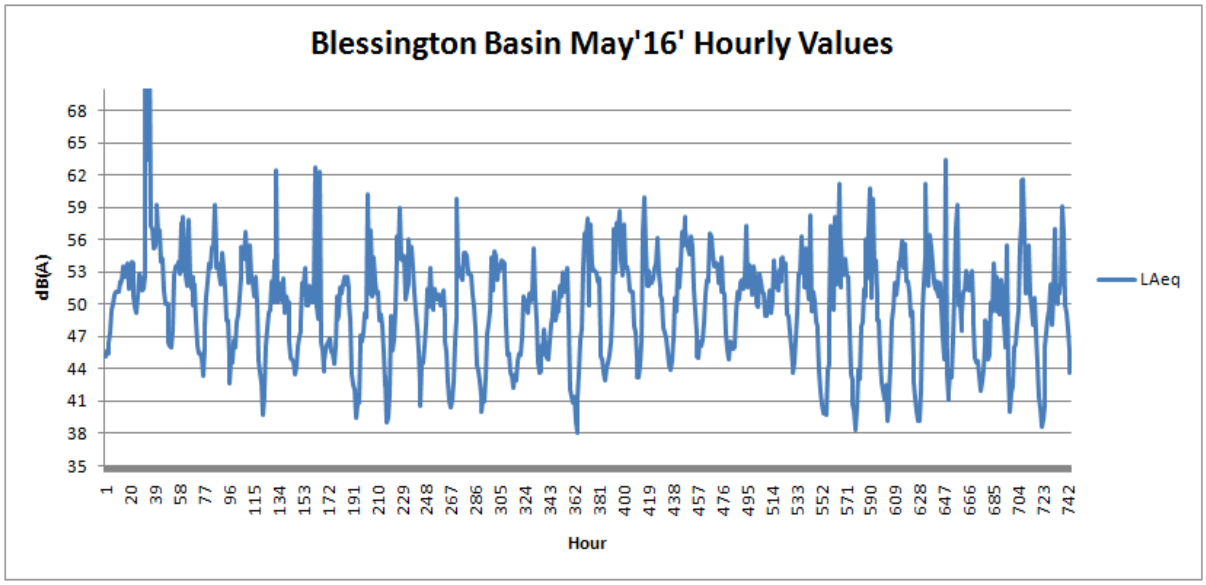

Blessington Basin Hourly Values 2016
dB(A)
Hour Number
Series1
Series2

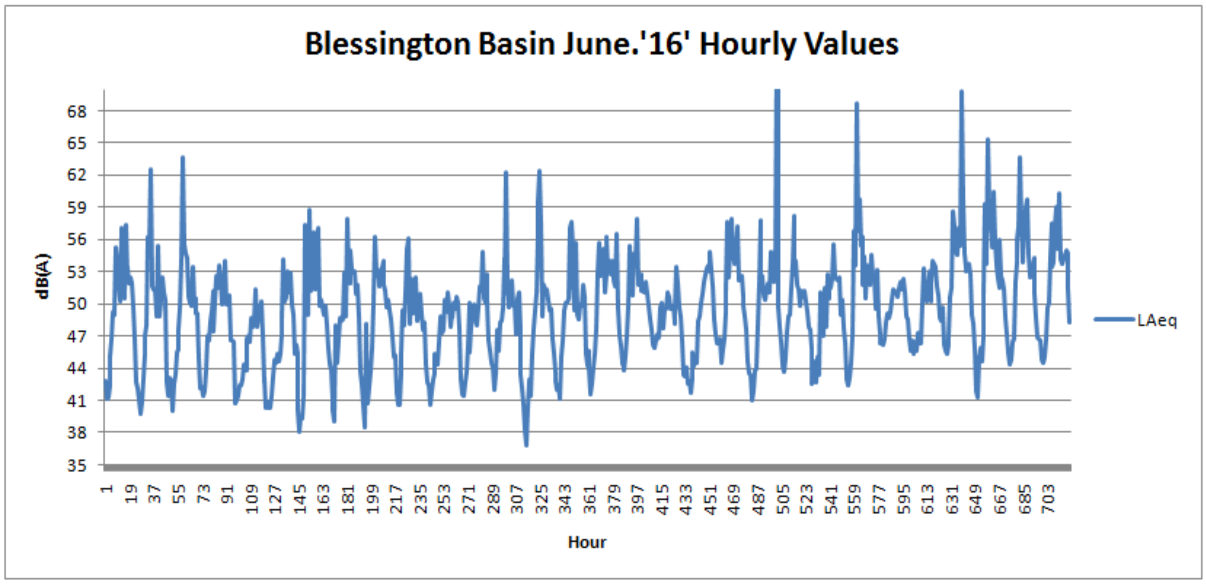

Blessington Basin January '16' Hourly Values
dB(A)
Hour
LAeq

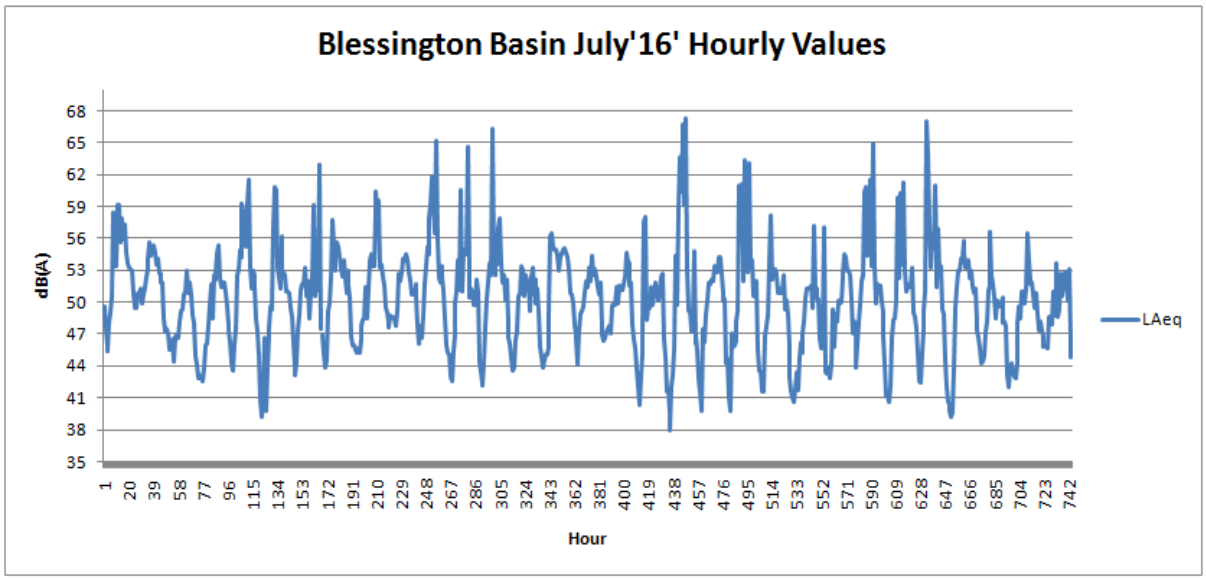

Blessington Basin February '16' Hourly Values
dB(A)
Hour
LAeq

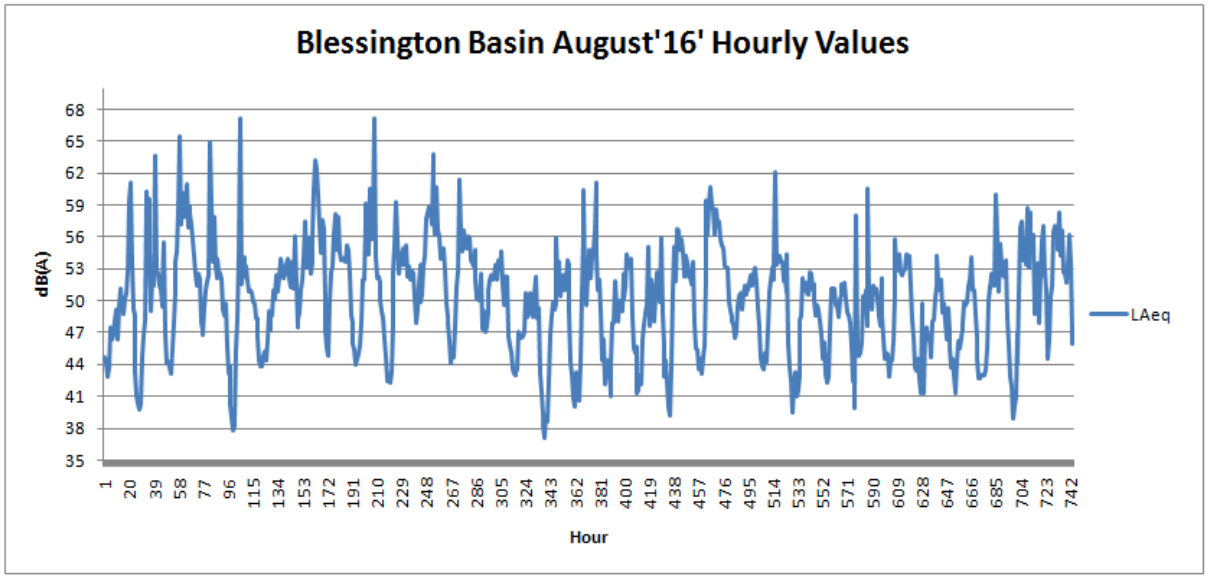

Blessington Basin March '16' Hourly Values
dB(A)
Hour
LAeq

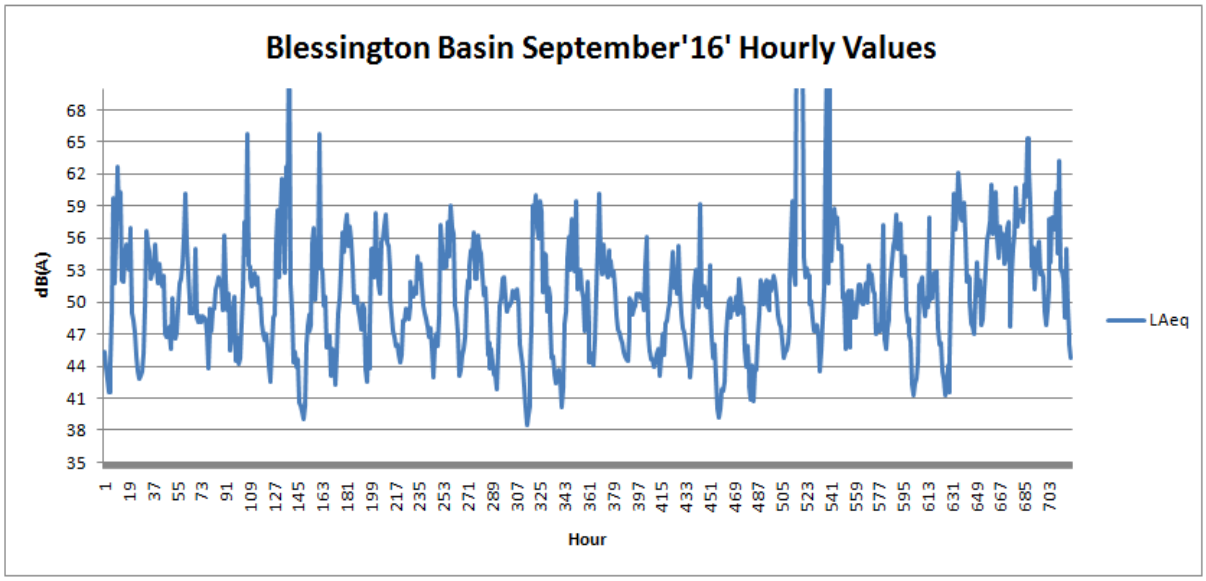

Blessington Basin April '16' Hourly Values
dB(A)
65
60
55
50
45
40
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

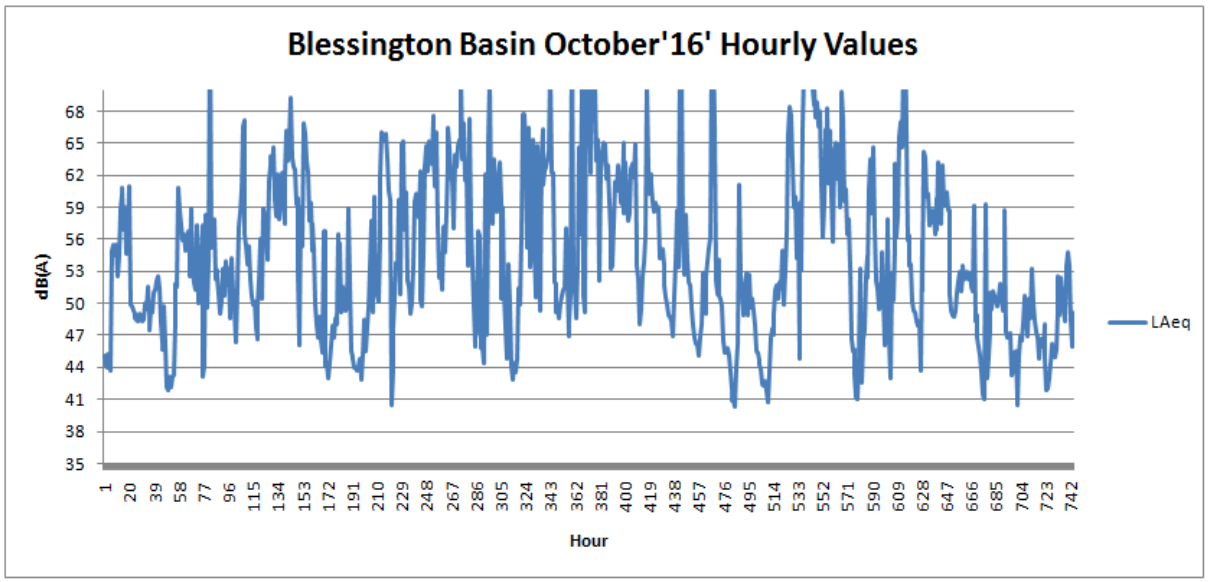

Blessington Basin May'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 20 39 58 77 96 115 134 153 172 191 210 229 248 267 286 305 324 343 362 381 400 419 438 457 476 495 514 533 552 571 590 609 628 647 666 685 704 723 742
Hour
LAeq

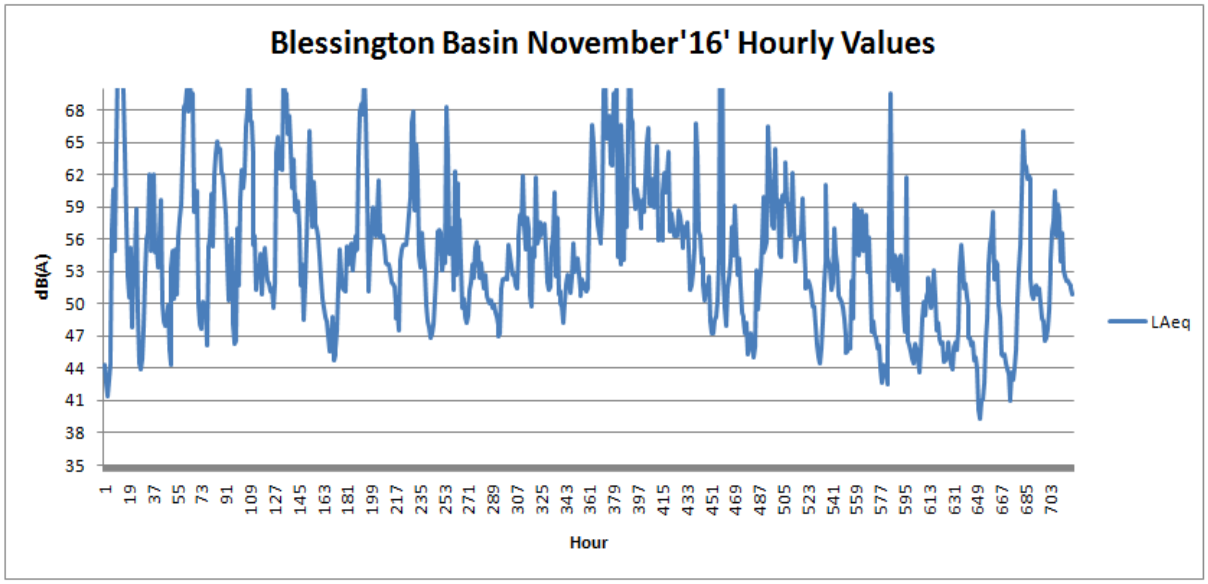

Blessington Basin June.'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1 19 37 55 73 91 109 127 145 163 181 199 217 235 253 271 289 307 325 343 361 379 397 415 433 451 469 487 505 523 541 559 577 595 613 631 649 667 685 703
Hour
LAeq

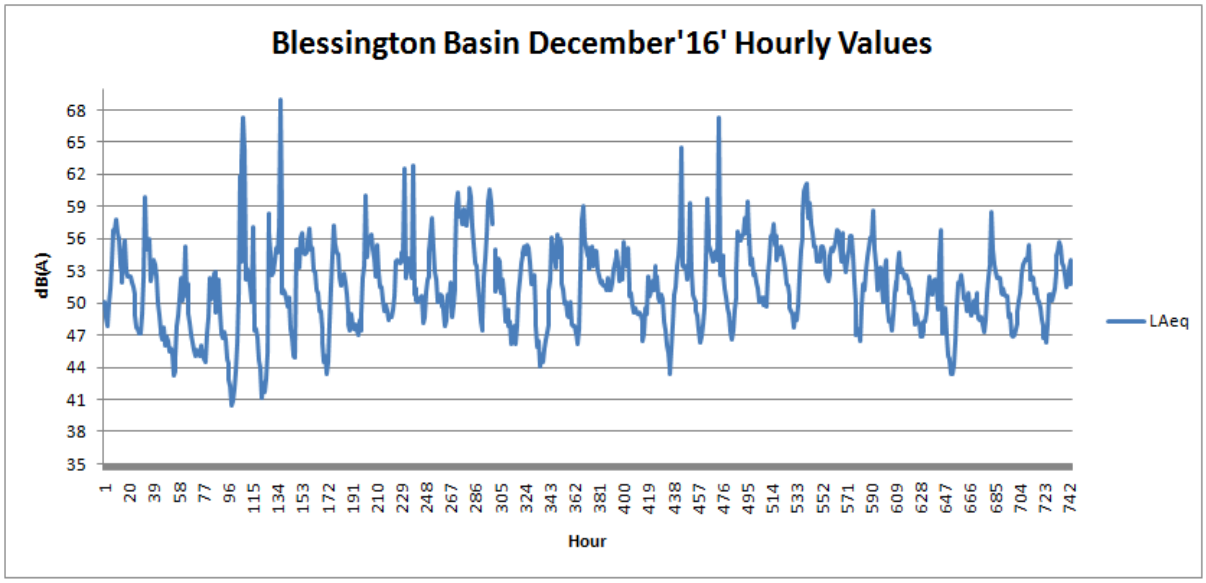

Blessington Basin July'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
20
39
58
77
96
115
134
153
172
191
210
229
248
267
286
305
324
343
362
381
400
419
438
457
476
495
514
533
552
571
590
609
628
647
666
685
704
723
742
Hour
LAeq


Blessington Basin August'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
20
39
58
77
96
115
134
153
172
191
210
229
248
267
286
305
324
343
362
381
400
419
438
457
476
495
514
533
552
571
590
609
628
647
666
685
704
723
742
Hour
LAeq


Blessington Basin September'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
Hour
LAeq


Blessington Basin October'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
20
39
58
77
96
115
134
153
172
191
210
229
248
267
286
305
324
343
362
381
400
419
438
457
476
495
514
533
552
571
590
609
628
647
666
685
704
723
742
Hour
LAeq

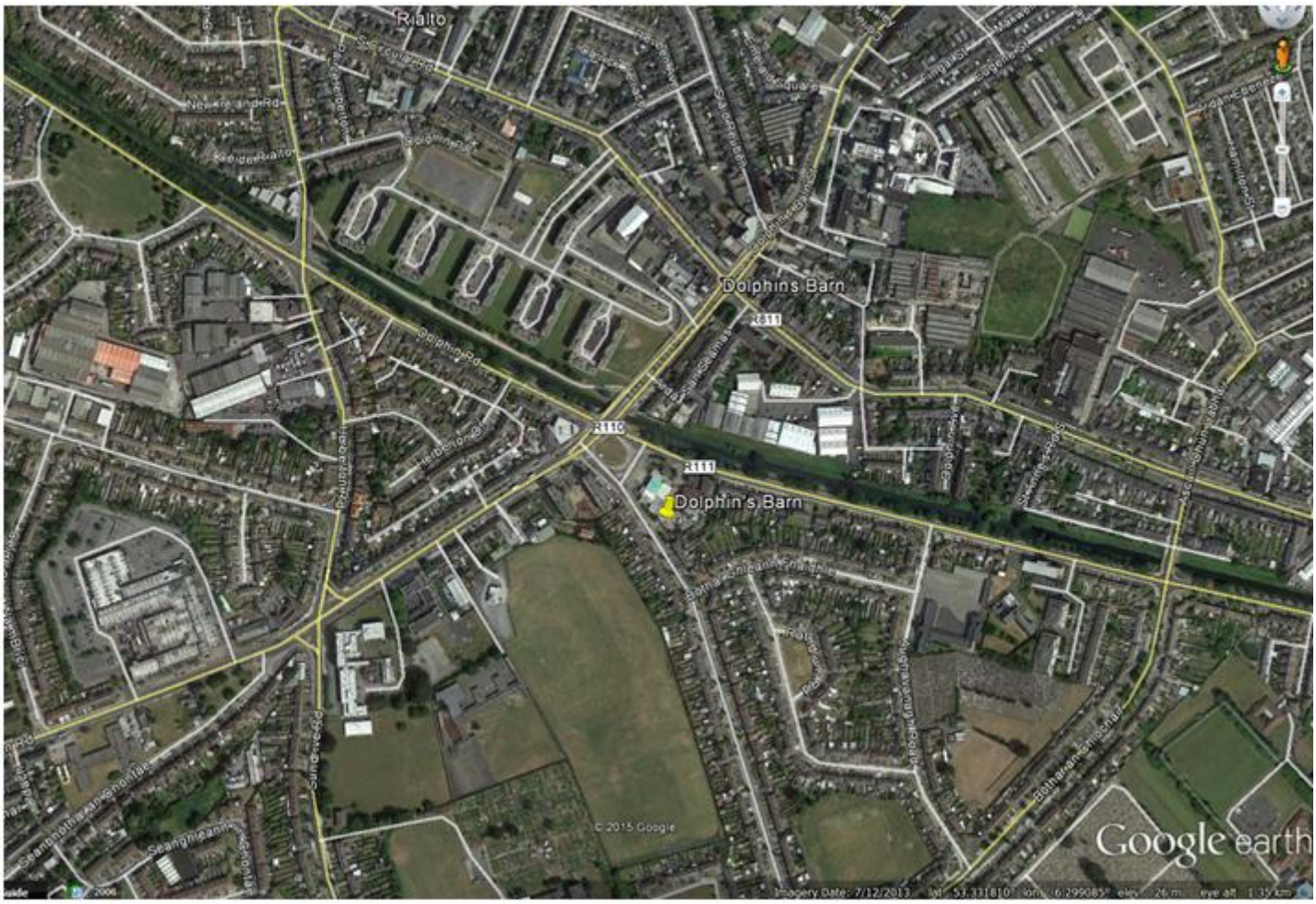

Blessington Basin November'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
Hour
LAeq

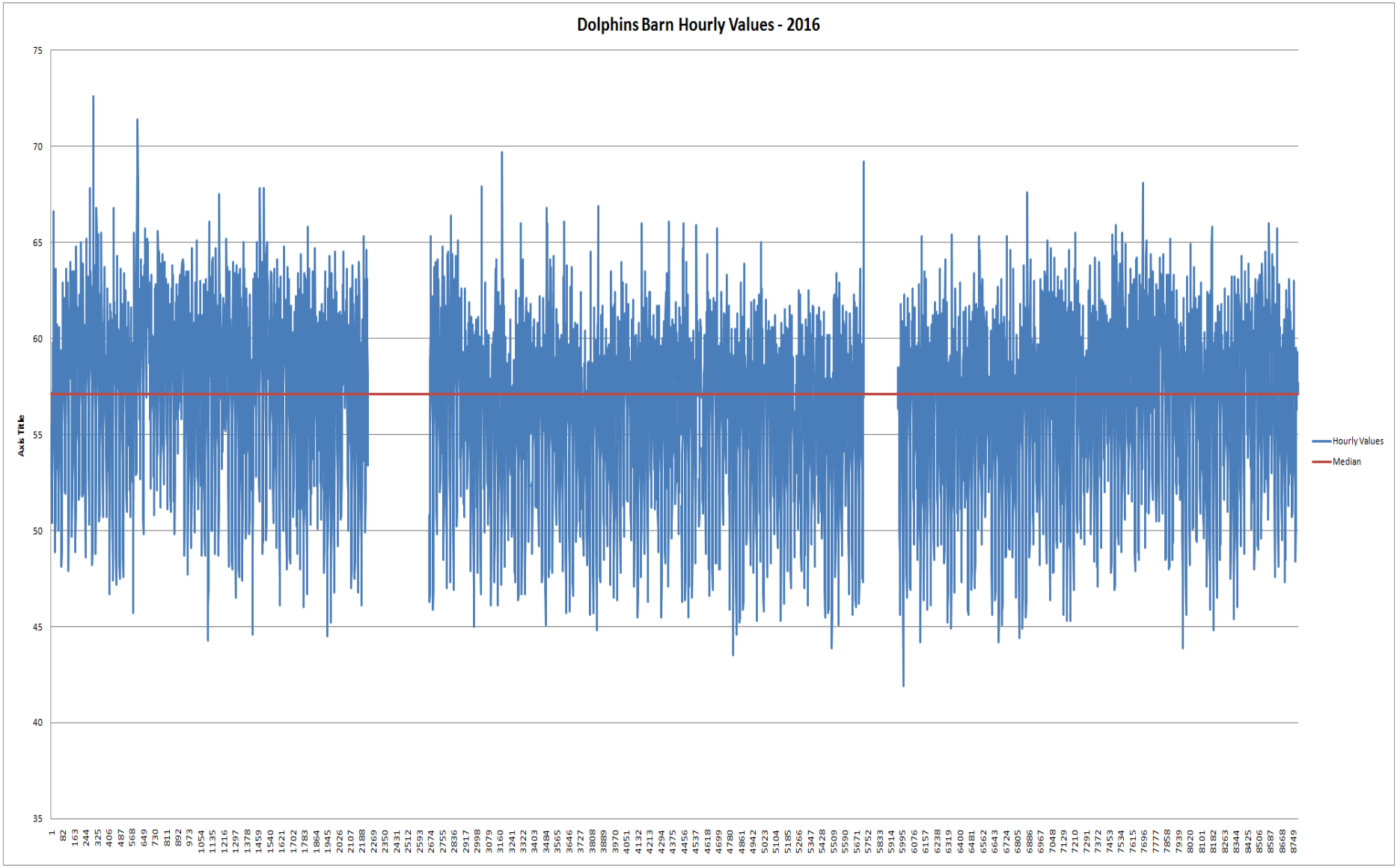

Blessington Basin December'16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
20
39
58
77
96
115
134
153
172
191
210
229
248
267
286
305
324
343
362
381
400
419
438
457
476
495
514
533
552
571
590
609
628
647
666
685
704
723
742
Hour
LAeq

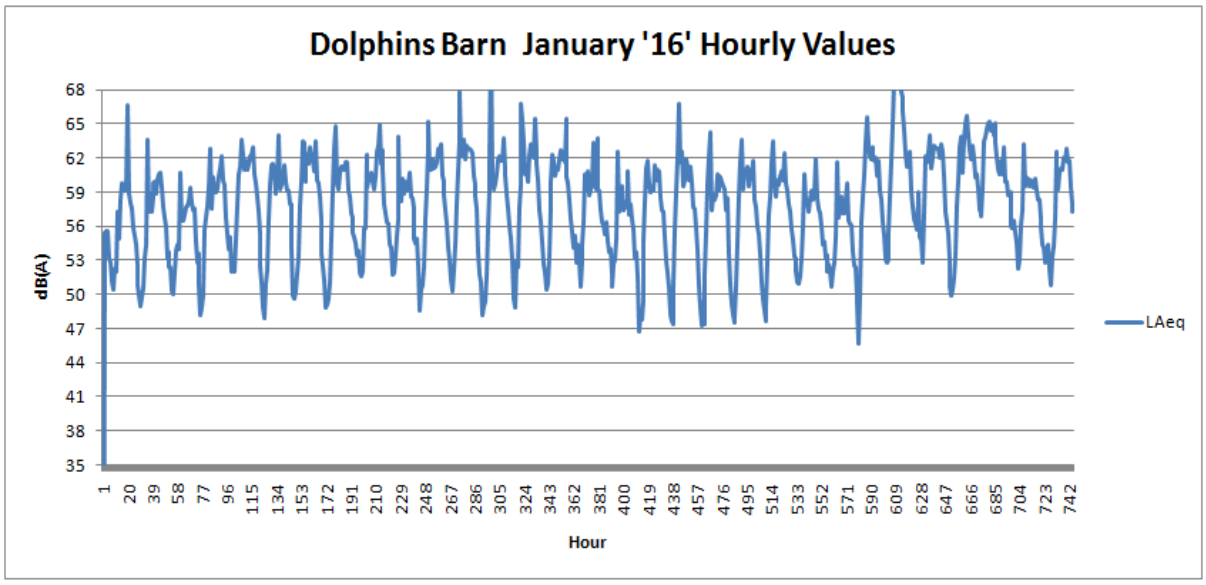
Dolphin's Barn

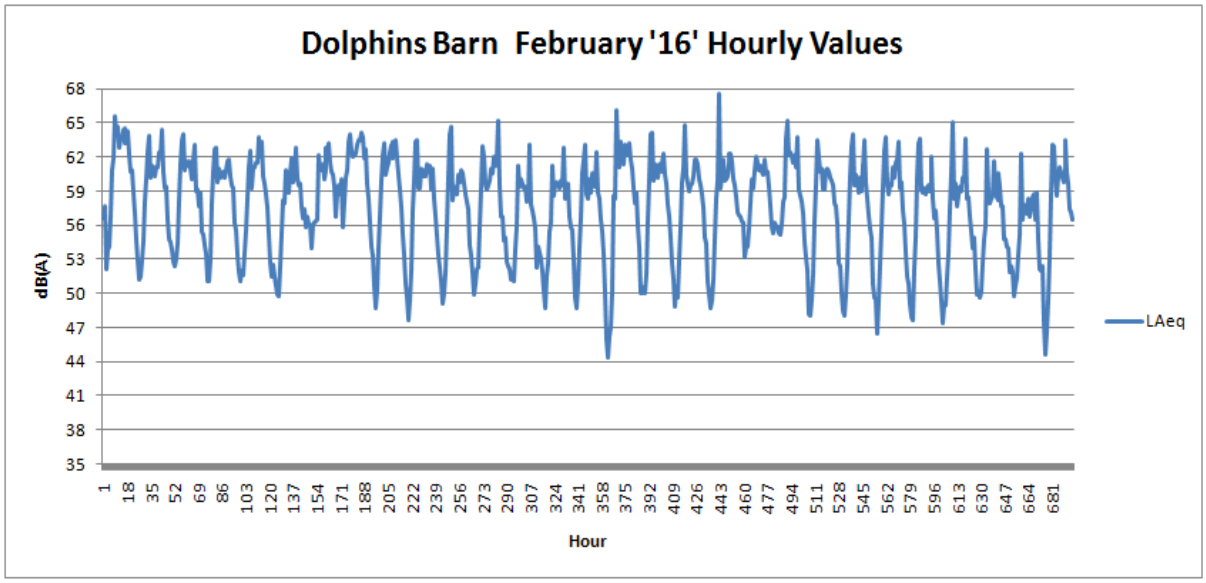
Parnell Road.

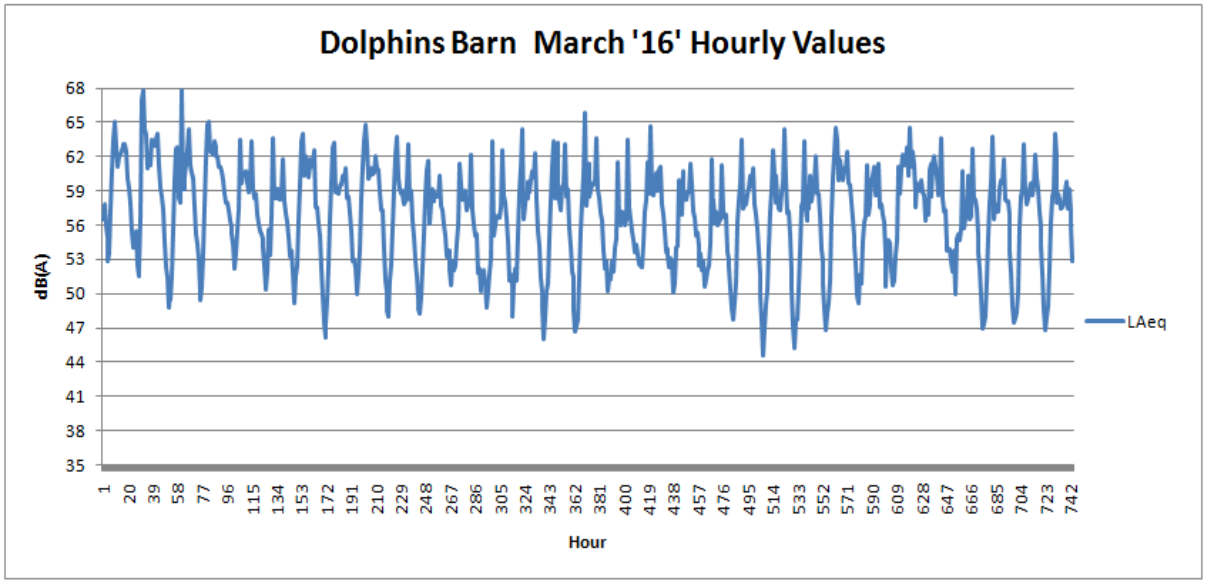
DUBLIN 8

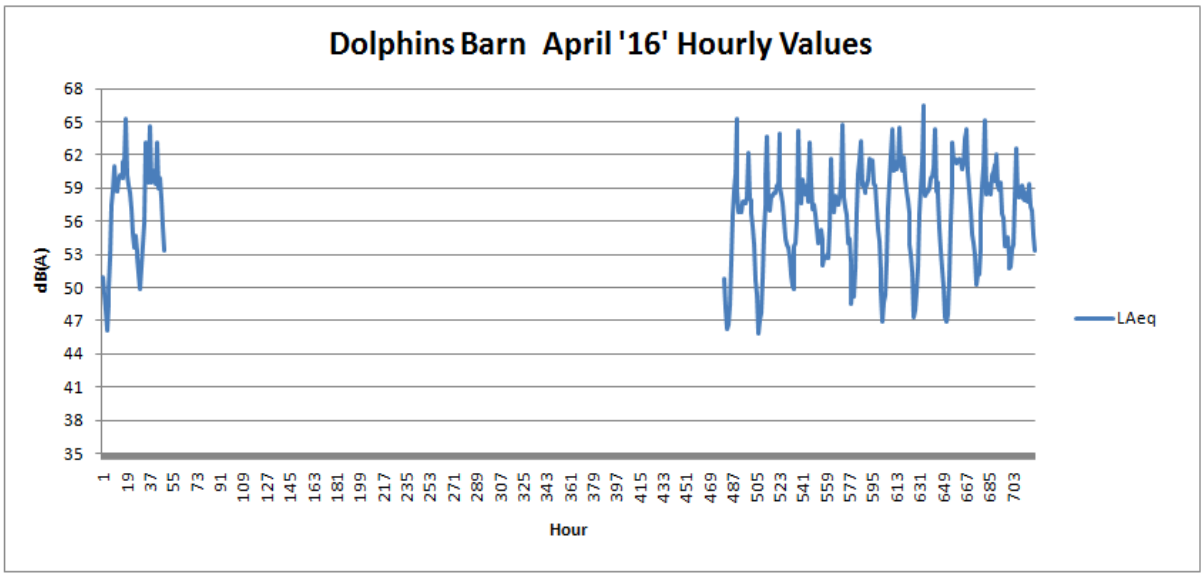


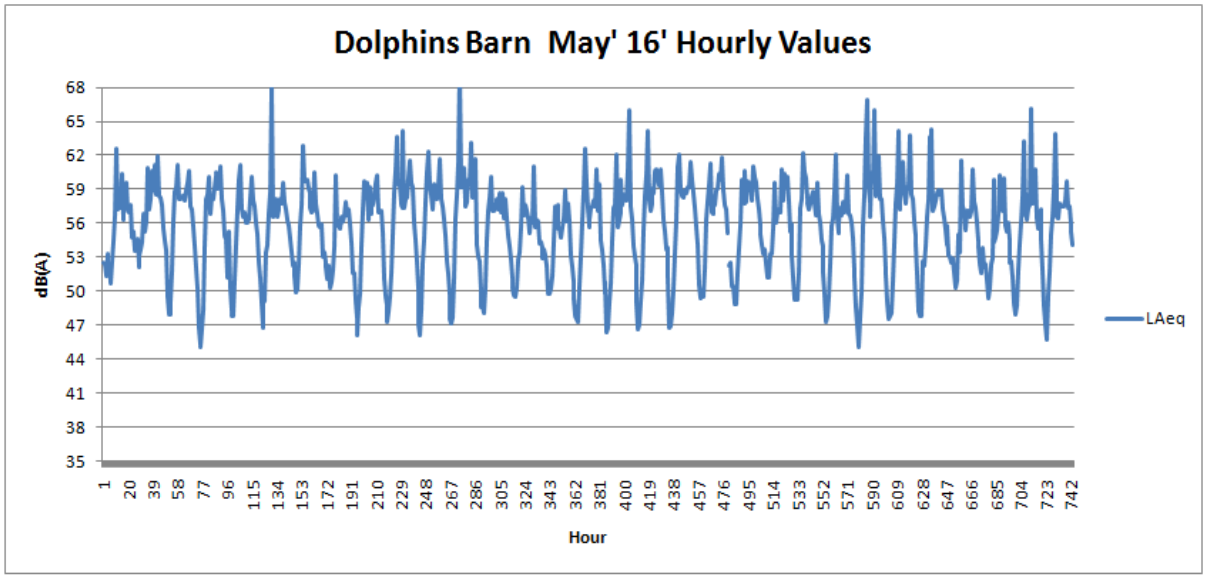

Dolphins Barn Hourly Values - 2016
Axis Title
75
70
65
60
55
50
45
40
35
1
82
163
244
325
406
487
568
649
730
811
892
973
1054
1135
1216
1297
1378
1459
1540
1621
1702
1783
1864
1945
2026
2107
2188
2269
2350
2431
2512
2593
2674
2755
2836
2917
2998
3079
3160
3241
3322
3403
3484
3565
3646
3727
3808
3889
3970
4051
4132
4213
4294
4375
4456
4537
4618
4699
4780
4861
4942
5023
5104
5185
5266
5347
5428
5509
5590
5671
5752
5833
5914
5995
6076
6157
6238
6319
6400
6481
6562
6643
6724
6805
6886
6967
7048
7129
7210
7291
7372
7453
7534
7615
7696
7777
7858
7939
8020
8101
8182
8263
8344
8425
8506
8587
8668
8749
Hourly Values
Median

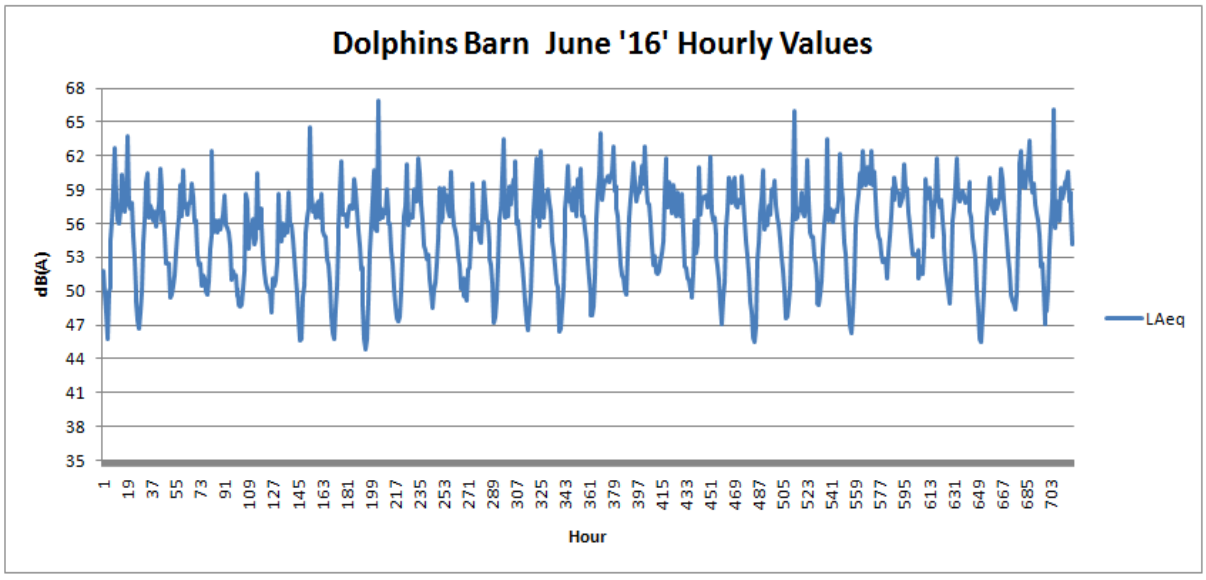

Dolphins Barn January '16' Hourly Values
dB(A)
Hour
LAeq

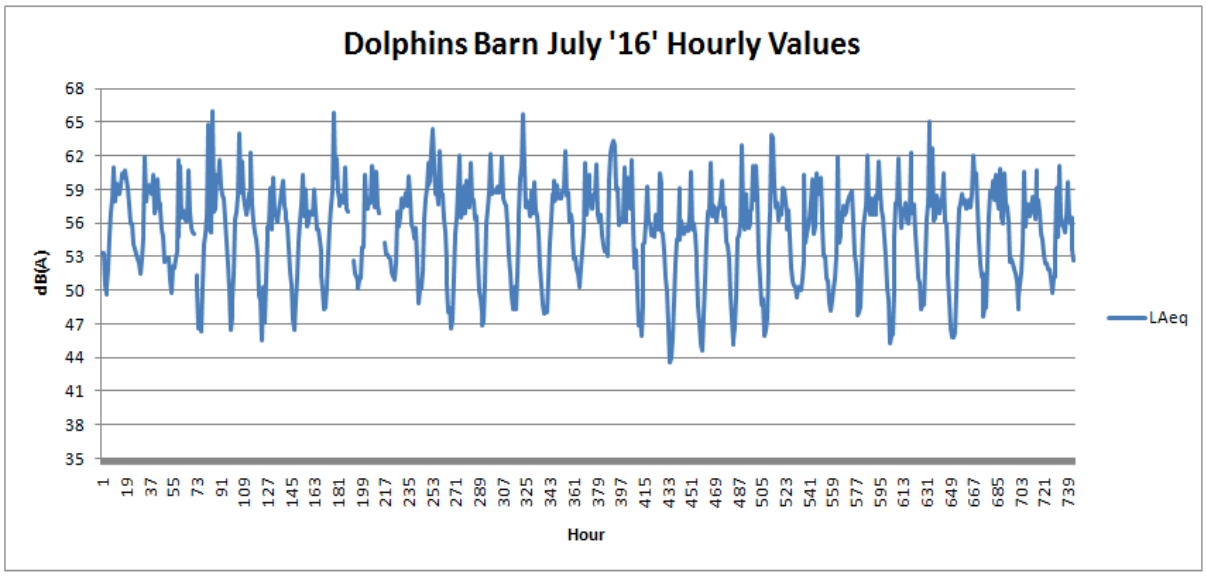

Dolphins Barn February '16' Hourly Values
dB(A)
Hour
LAeq

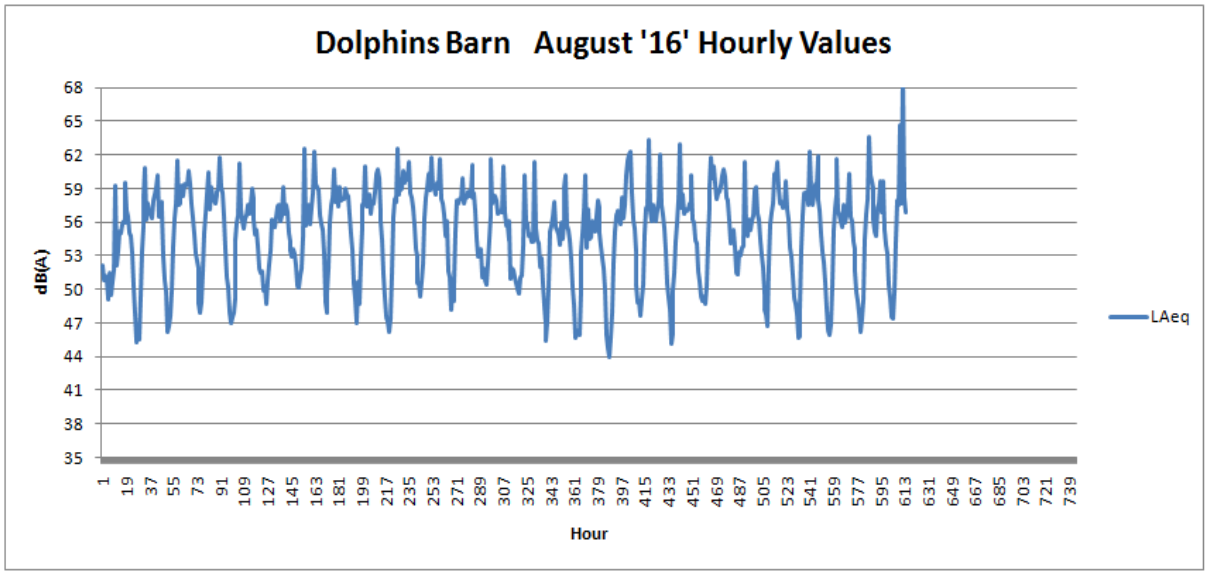

Dolphins Barn March '16' Hourly Values
dB(A)
Hour
LAeq

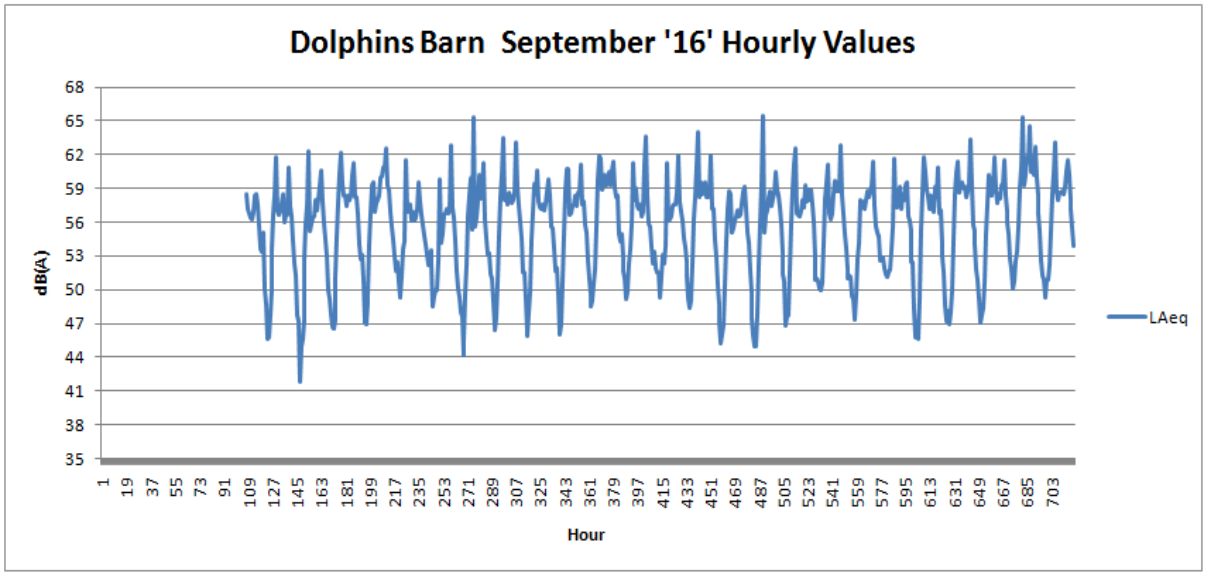

Dolphins Barn April '16' Hourly Values
dB(A)
Hour
LAeq

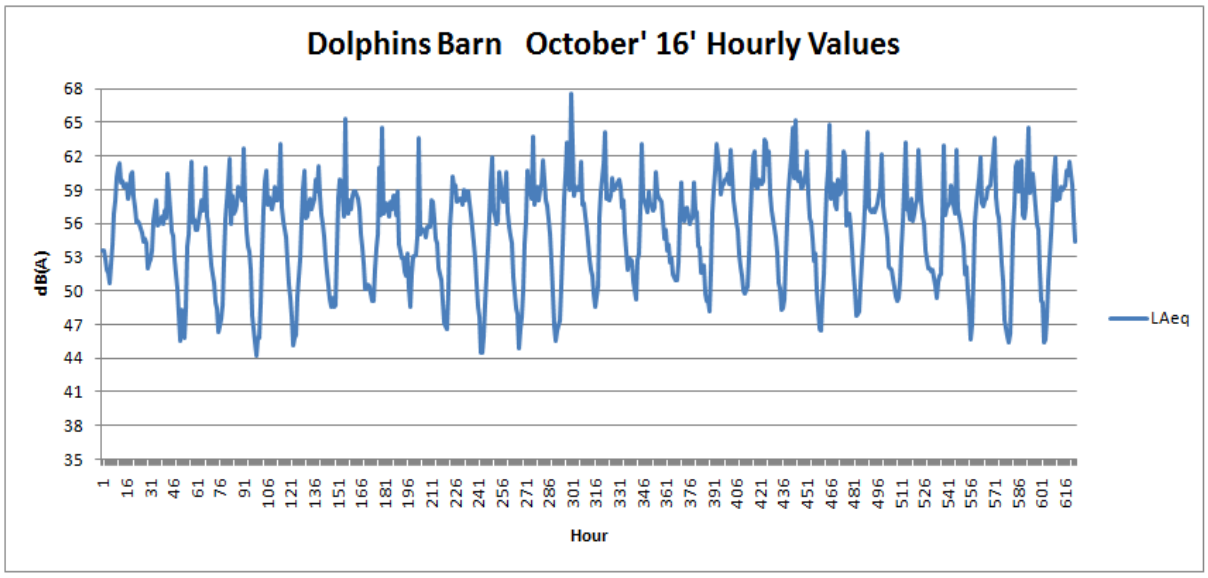

Dolphins Barn May' 16' Hourly Values
dB(A)
Hour
LAeq

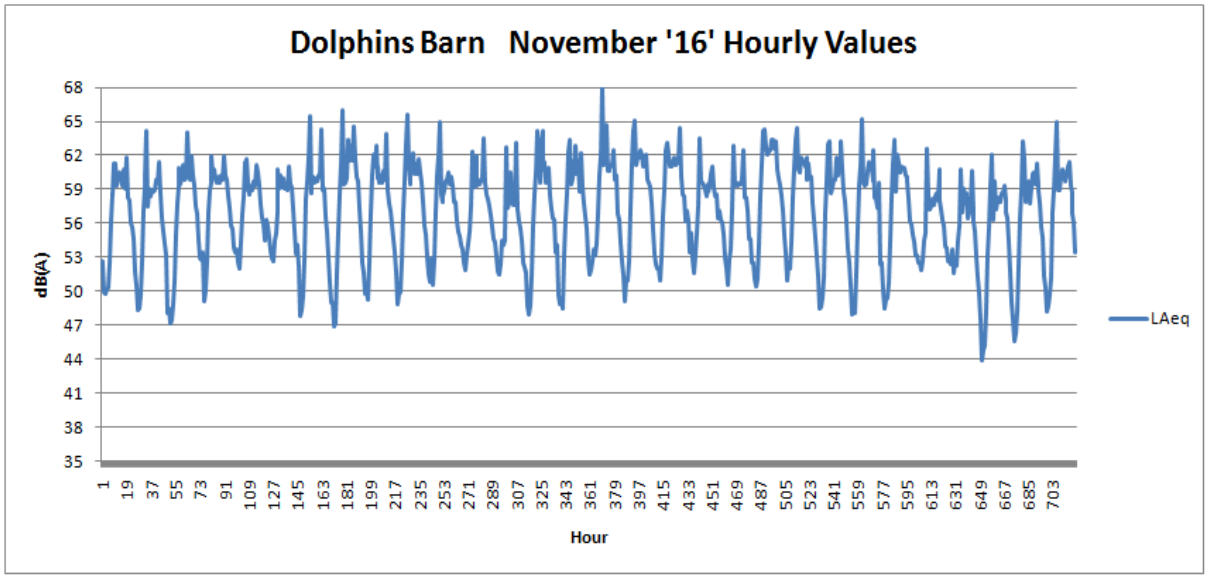

Dolphins Barn June '16' Hourly Values
dB(A)
Hour
LAeq

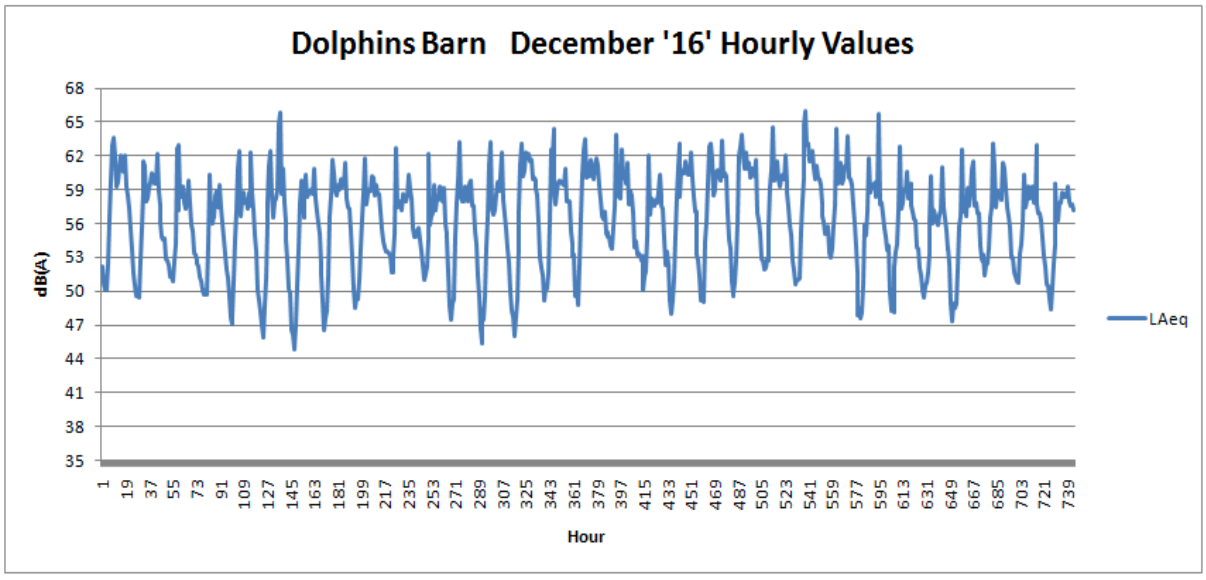

Dolphins Barn July '16' Hourly Values
dB(A)
Hour
LAeq


Dolphins Barn August '16' Hourly Values
dB(A)
Hour
LAeq


Dolphins Barn September '16' Hourly Values
dB(A)
Hour
LAeq


Dolphins Barn October' 16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
16
31
46
61
76
91
106
121
136
151
166
181
196
211
226
241
256
271
286
301
316
331
346
361
376
391
406
421
436
451
466
481
496
511
526
541
556
571
586
601
616
Hour
LAeq

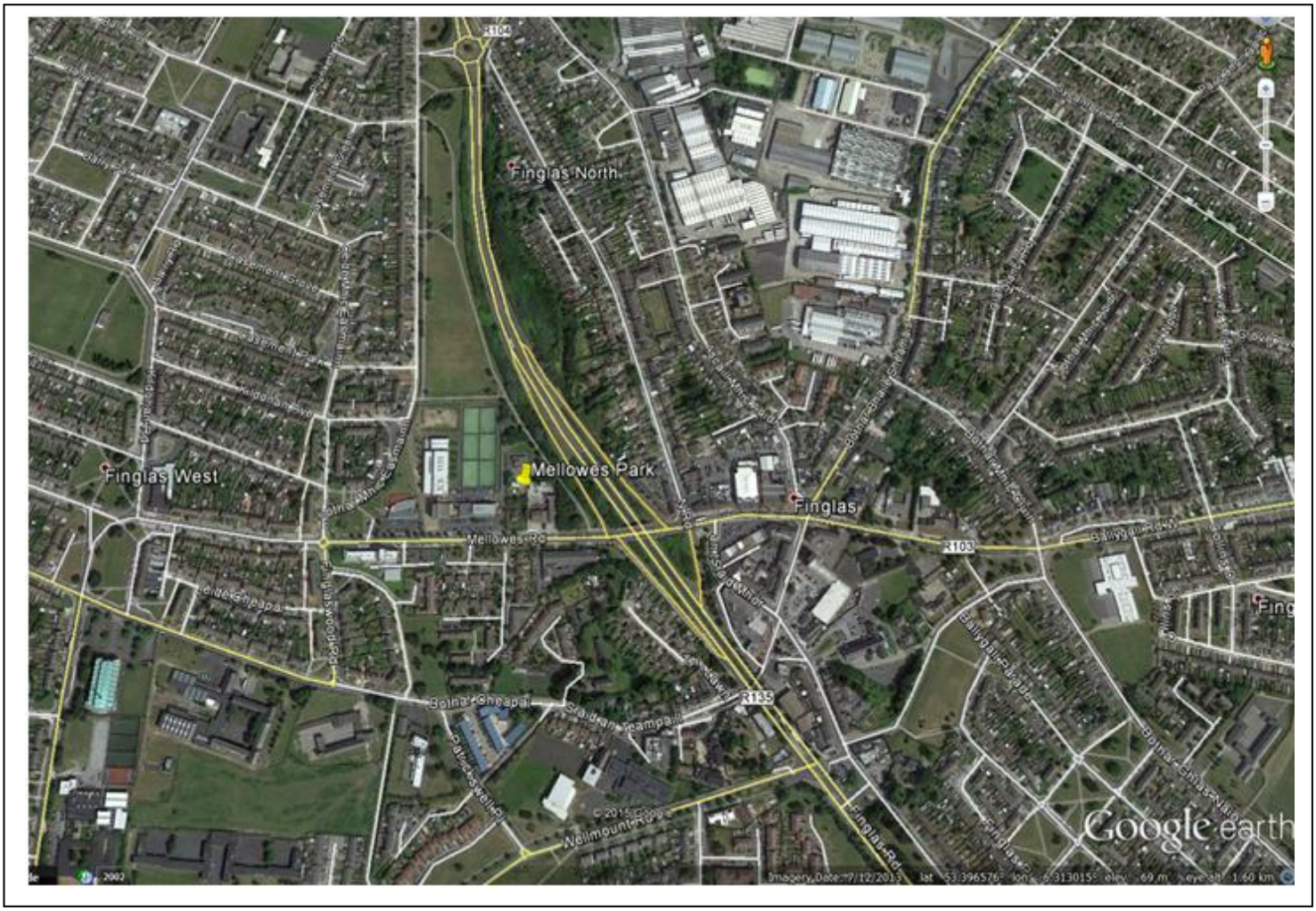

Dolphins Barn November '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
Hour
LAeq

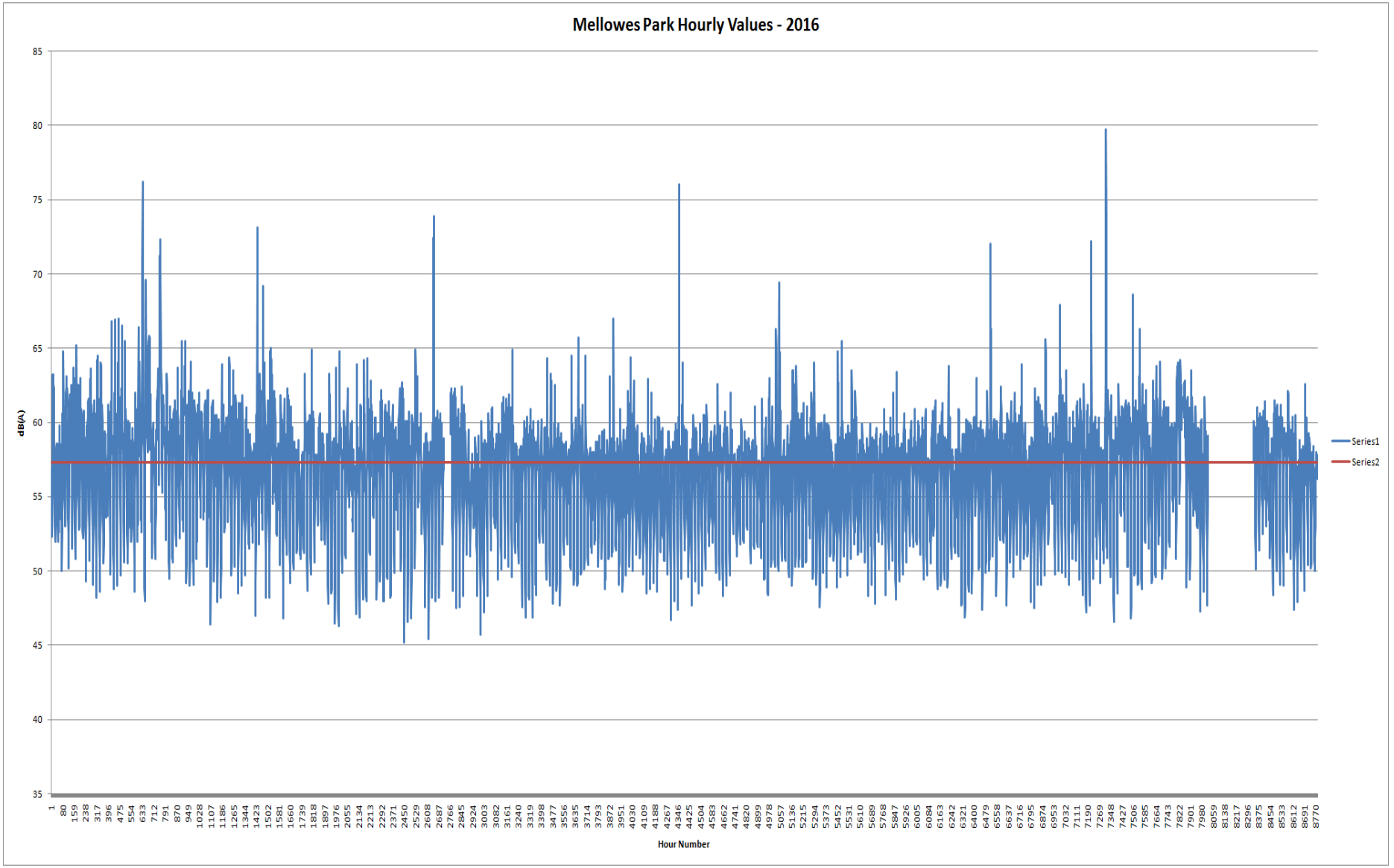

Dolphins Barn December '16' Hourly Values
dB(A)
68
65
62
59
56
53
50
47
44
41
38
35
1
19
37
55
73
91
109
127
145
163
181
199
217
235
253
271
289
307
325
343
361
379
397
415
433
451
469
487
505
523
541
559
577
595
613
631
649
667
685
703
721
739
Hour
LAeq

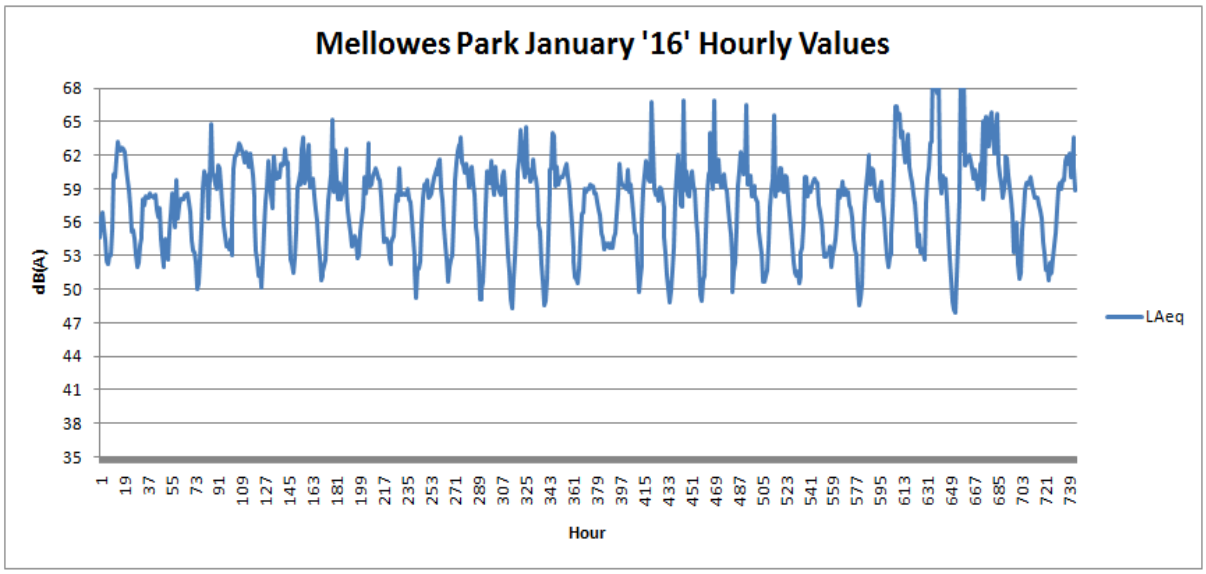
Mellowes Park

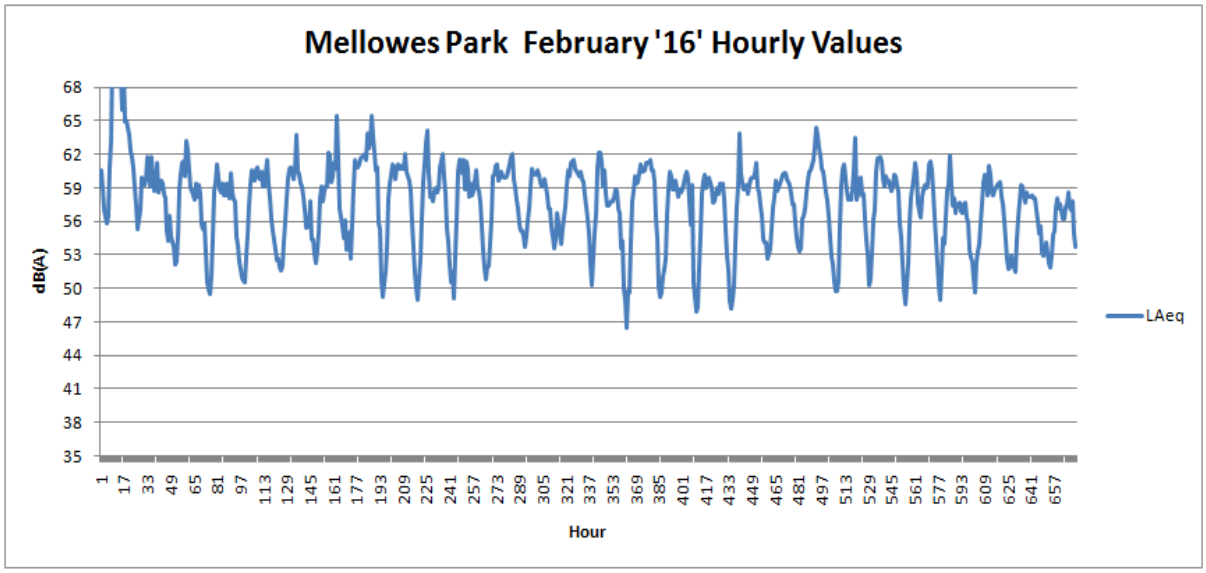
Finglas

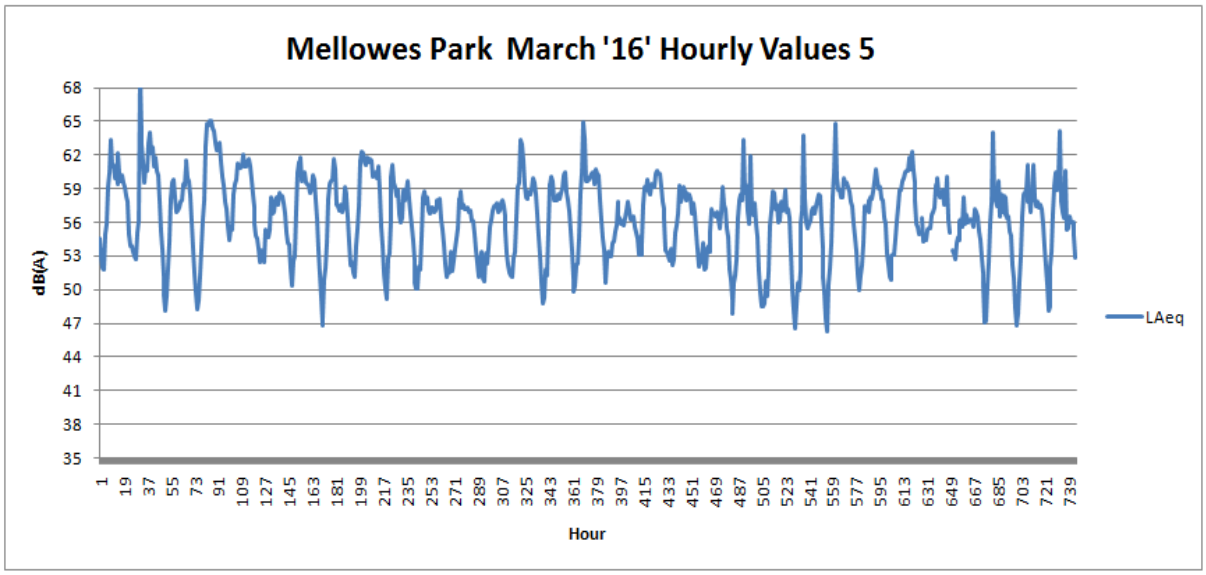
DUBLIN 11

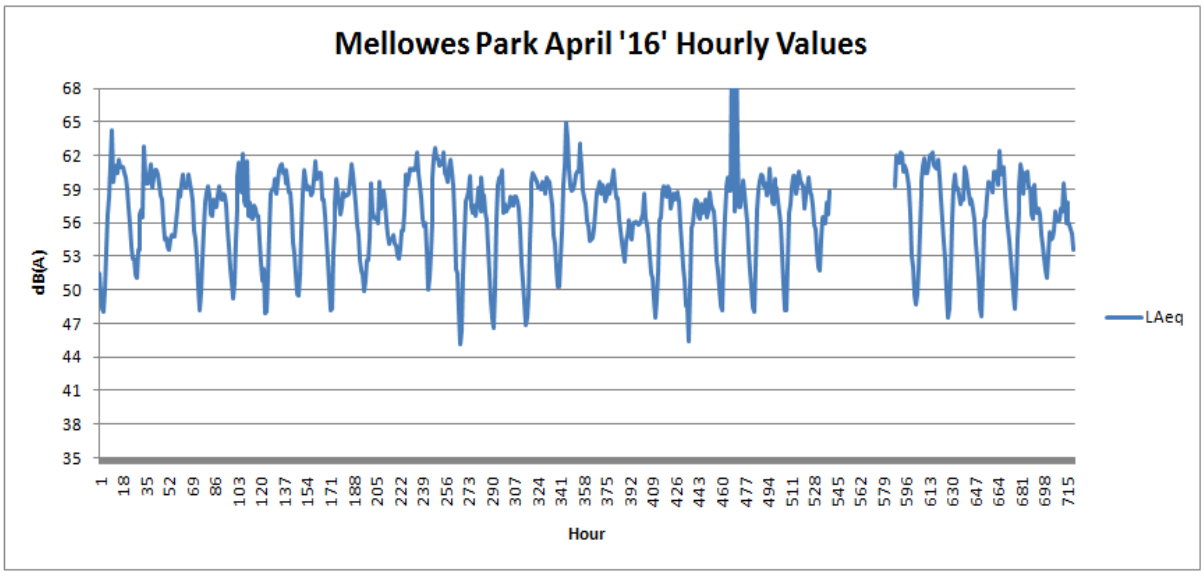


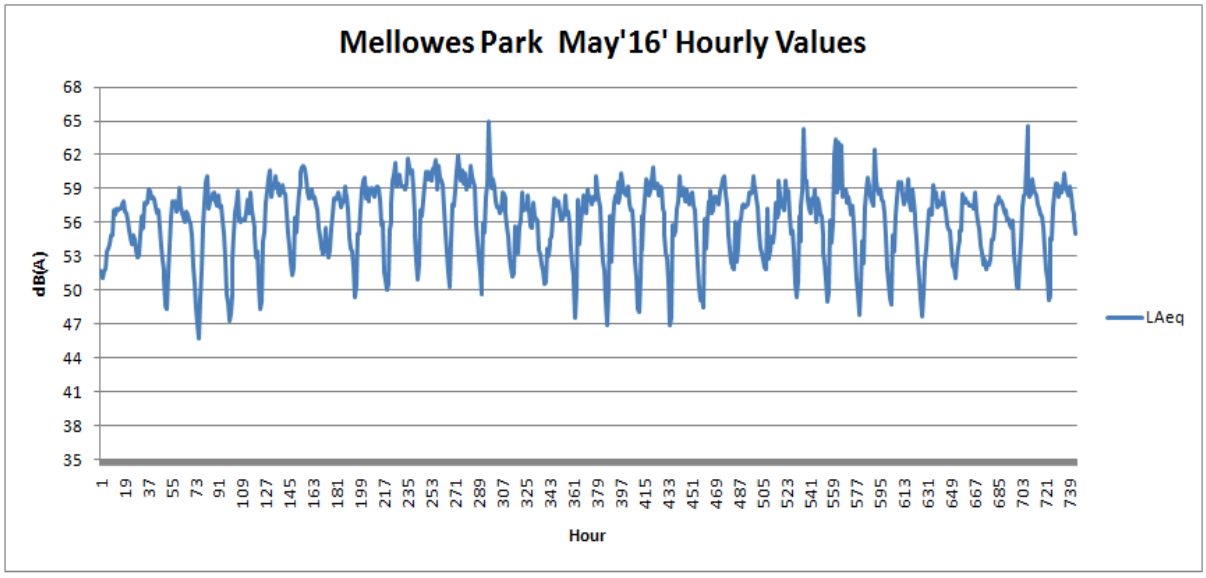

Mellowes Park Hourly Values - 2016
dB(A)
85
80
75
70
65
60
55
50
45
40
35
Hour Number
1
80
159
238
317
396
475
554
633
712
791
870
949
1028
1107
1186
1265
1344
1423
1502
1581
1660
1739
1818
1897
1976
2055
2134
2213
2292
2371
2450
2529
2608
2687
2766
2845
2924
3003
3082
3161
3240
3319
3398
3477
3556
3635
3714
3793
3872
3951
4030
4109
4188
4267
4346
4425
4504
4583
4662
4741
4820
4899
4978
5057
5136
5215
5294
5373
5452
5531
5610
5689
5768
5847
5926
6005
6084
6163
6242
6321
6400
6479
6558
6637
6716
6795
6874
6953
7032
7111
7190
7269
7348
7427
7506
7585
7664
7743
7822
7901
7980
8059
8138
8217
8296
8375
8454
8533
8612
8691
8770
Series1
Series2

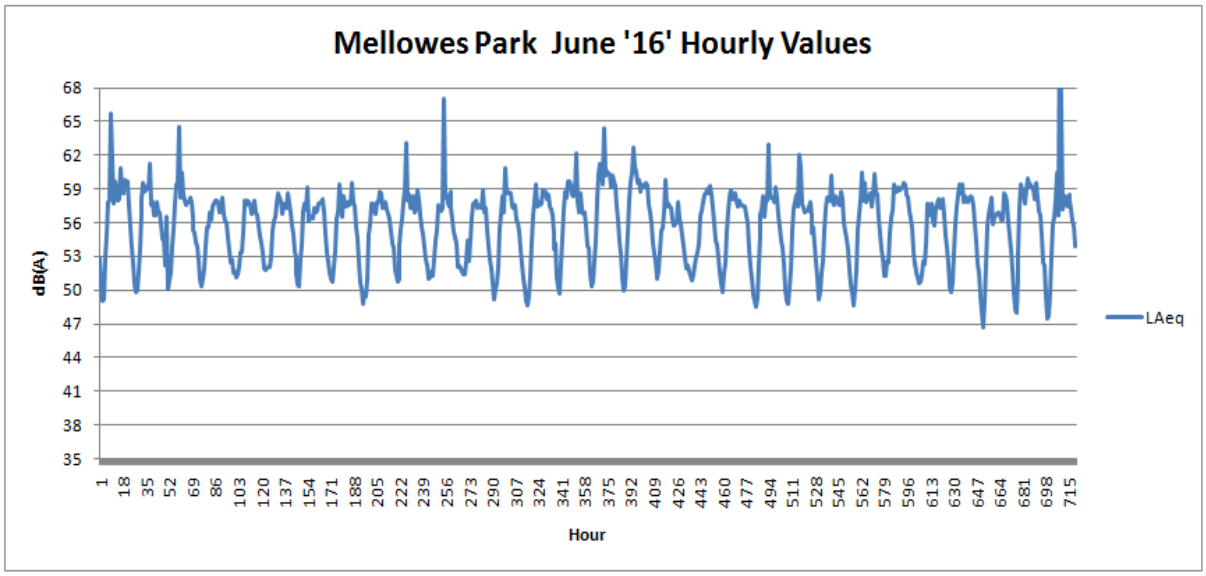

Mellowes Park January '16' Hourly Values
dB(A)
Hour
LAeq

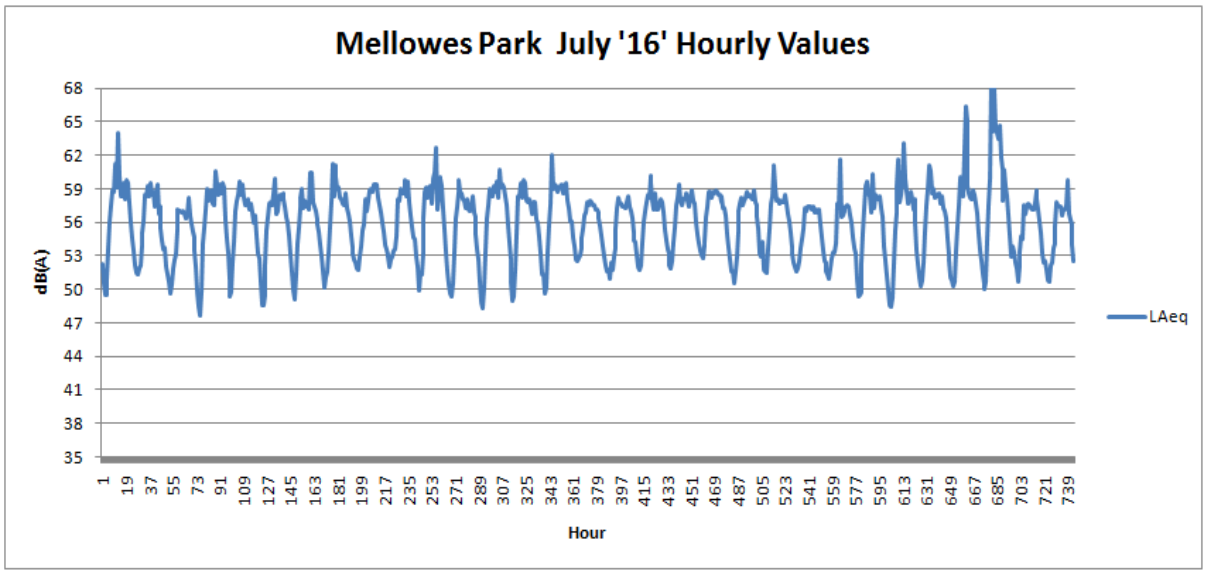

Mellowes Park February '16' Hourly Values
dB(A)
Hour
LAeq

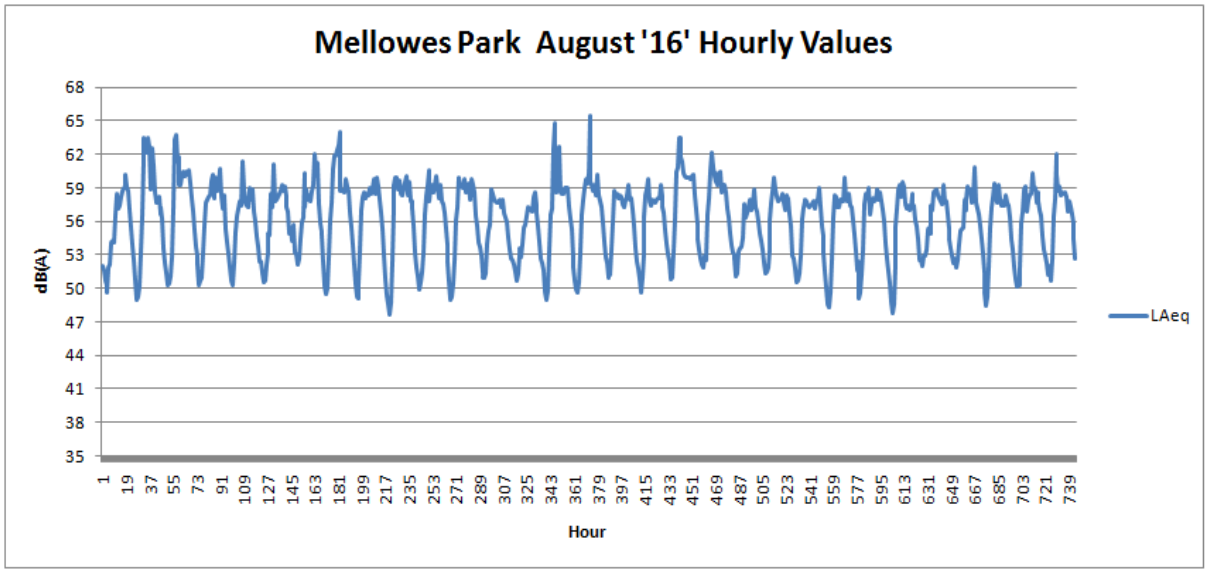

Mellowes Park March '16' Hourly Values 5
dB(A)
Hour
LAeq

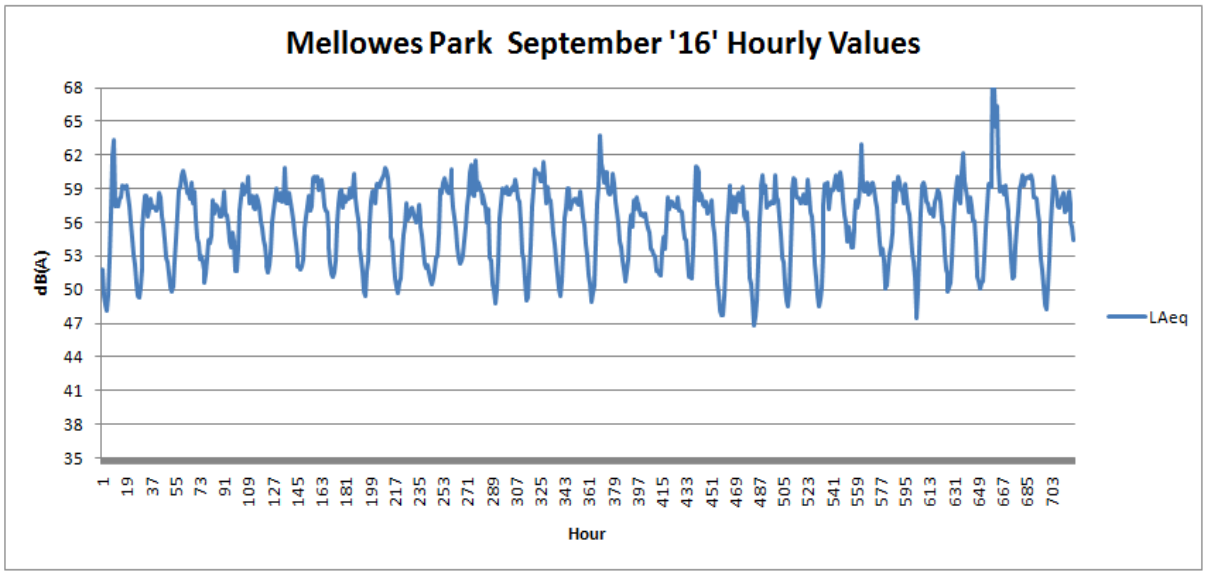

Mellowes Park April '16' Hourly Values
dB(A)
Hour
LAeq

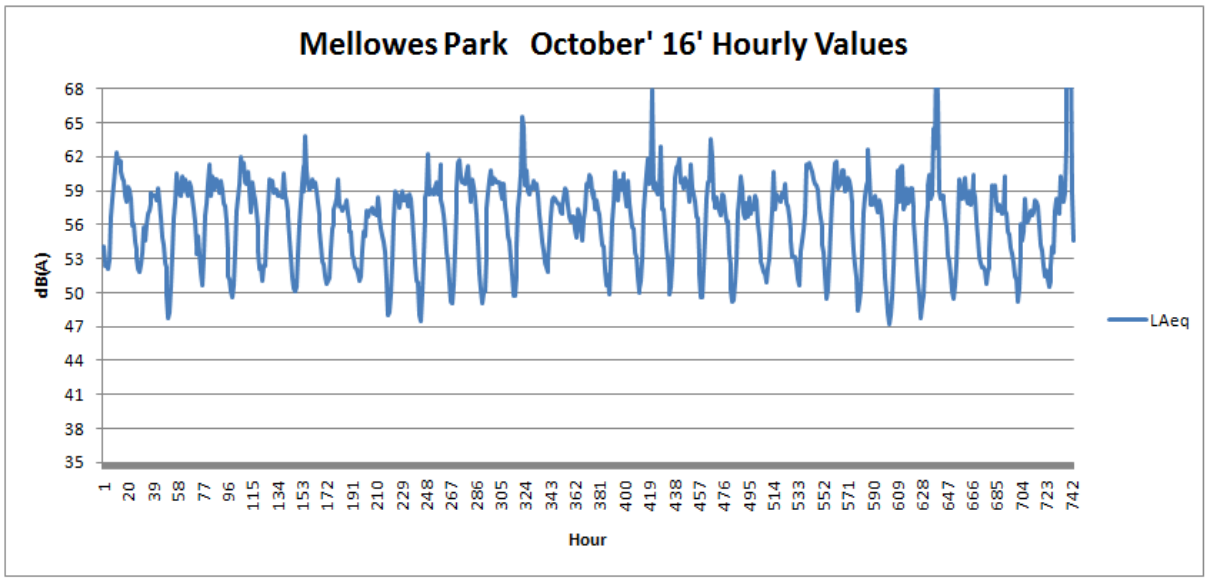

Mellowes Park May'16' Hourly Values
dB(A)
Hour
LAeq

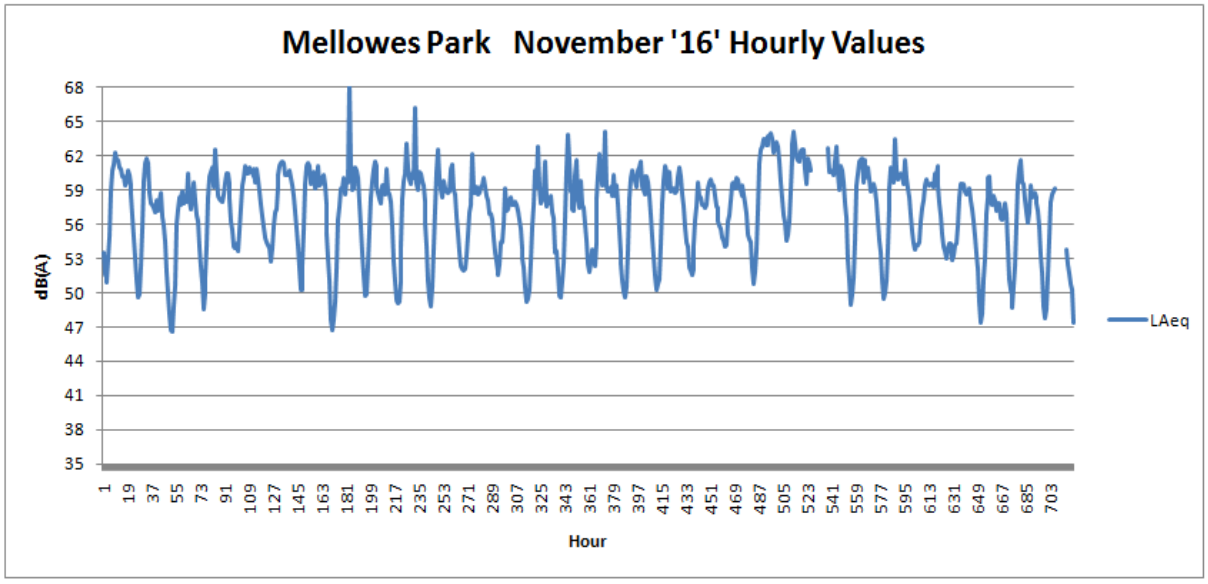

Mellowes Park June '16' Hourly Values
dB(A)
Hour
LAeq

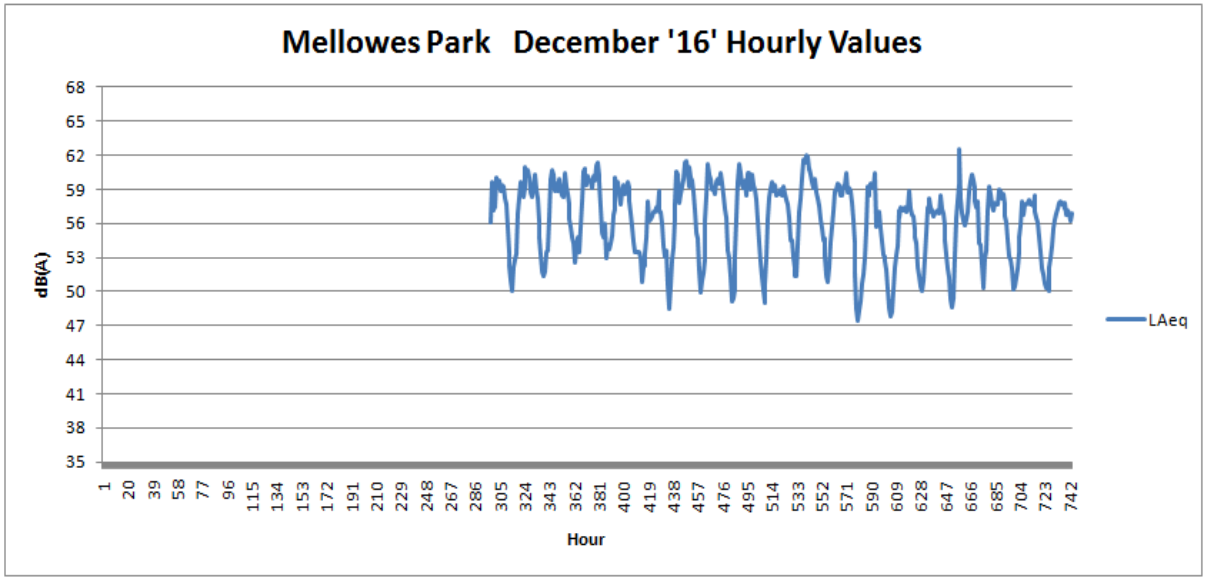

Mellowes Park July '16' Hourly Values
dB(A)
Hour
LAeq


Mellowes Park August '16' Hourly Values
dB(A)
Hour
LAeq


Mellowes Park September '16' Hourly Values
dB(A)
Hour
LAeq


Mellowes Park October' 16' Hourly Values
dB(A)
Hour
LAeq


Mellowes Park November '16' Hourly Values
dB(A)
Hour
LAeq


Mellowes Park December '16' Hourly Values
dB(A)
Hour
LAeq

Notes


Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council